CONSUMERS UNION reports-

JAN 15 1937

NOVEMBER
1936

JUN -4 1937

1937 RADIOS

TOASTERS

1937 AUTOMOBILES

WINTER OILS

CHILDREN'S SHOES

WINES

BAKING POWDER

CONSUMERS UNION
OF UNITED STATES
55 Vandam St. New York

Radio's Magic Eye *(See page 3)*

CONSUMERS UNION reports

VOLUME I NUMBER 7 — 55 — NOVEMBER, 1936

MR. GOSCH'S MILLION

IS IT a crime to tell the truth about harmful or worthless products? Are the directors of Consumers Union criminals for daring to expose products bearing the brand names of powerful and wealthy business organizations?

Because it tells the truth about things consumers buy, Consumers Union has been subjected to violent, if only verbal, attack from many quarters.

The latest attack comes from the Ronrico Company, producers of a Puerto Rican rum which is distributed in the United States by McKesson & Robbins. Consumers Union reported in October that samples of Ronrico Rum were found to contain sulfuric acid and manganese, and warned its members against this hazardous product. Shortly after the appearance of the report, J. B. Gosch, vice-president of the Ronrico Company, stormed into Consumers Union headquarters and announced that he would have the whole staff in jail and the organization padlocked within thirty days. Long practiced in appraising the statements of the Gosches of the business world at their true worth, the Consumers Union staff went serenely on with its work.

Several days later, however, Deputy Assistant District Attorney Sullivan of New York demanded that the Consumers Union officials come to the District Attorney's office for questioning, threatening Grand Jury action if they failed to appear. When the Director, the Treasurer, and the Secretary of Consumers Union arrived at Mr. Sullivan's office, they found there none other than Mr. Gosch and an associate of his. "We got you down here to give you a chance to retract your statements about Ronrico Rum," they said, with Mr. Sullivan apparently finding nothing out of order in a liquor dealer's taking over the functions of the District Attorney's office.

Thereafter, threat was piled on threat as to what would happen if the statements were not retracted. Mr. Gosch and his associate intimated that a million dollars would be spent to put the heads of Consumers Union in jail if they did not retract the statements that Ronrico Rum contained sulfuric acid and manganese. Apparently to show their willingness to spend money to gain their ends, Mr. Gosch asserted that they had paid $3,500 to Chicago authorities to quash a political attack on their product by the Board of Health in Chicago.

Refusing to be intimidated by either liquor dealers or politicians, Consumers Union does not retract its statement about Ronrico Rum, nor will it retract any other statement which it makes to protect its members, and which it knows to be correct. The job of Consumers Union is to protect the health and the pocketbooks of its members. It will continue to do this despite threats from any source.

In the case of Ronrico Rum, the original report was based on analyses made a few months ago. To see whether McKesson & Robbins or the Ronrico Company had since eliminated sulfuric acid and manganese from their products, further tests were made on samples purchased in New York stores in November. Seven out of eight of the bottles tested contained sulfuric acid and manganese.

Consumers Union members are urged to call on the health departments in their communities to analyze Ronrico Rum and to demand that it be banned from local stores if the bottles sold there are found to be contaminated. This is the kind of answer members should make to those who threaten to prevent Consumers Union from telling the truth.

IN THIS ISSUE

1937 RADIOS 3

LABOR IN THE RADIO PLANTS 9

ELECTRIC TOASTERS . . 11

THE NEW AUTOMOBILES . 13

WINTER MOTOR OILS . . 16

CHILDREN'S SHOES . . . 17

WINES 19

BAKING POWDER . . . 23

LETTERS 24

Consumers Union Moves

To keep pace with the rapid growth in membership—now 18,000—and the corresponding growth of its staff, Consumers Union is moving to new and larger quarters at 55 Vandam Street, New York, as this issue goes to press.

When *You* Move—

Please send us your new address as quickly as possible. The Reports are mailed about the 25th of the month in which they are dated. If an issue is to go to a new address, notice must be received by the 15th of the month.

CONSUMERS UNION *Reports* is published monthly by Consumers Union of United States, Inc., publication office, 4411 Skillman Avenue, Long Island City, N.Y.; executive offices, 55 Vandam Street, New York City. OFFICERS: Colston E. Warne, *president;* James Gilman and Julius Hochman, *vice-presidents;* Frank Palmer, *secretary;* Adelaide Schulkind, *treasurer*. BOARD OF DIRECTORS: Robert Brady, Heywood Broun, Osmond K. Fraenkel, James Gilman, John Heasty, A. J. Isserman, Arthur Kallet, Charles A. Marlies, D. H. Palmer, Frank Palmer, A. Philip Randolph, Bernard Reis, Rose Schneiderman, Adelaide Schulkind, and Colston E. Warne. Consumers Union of United States is a non-profit, membership organization. Membership fees are: $3.00 a year, of which $2.50 is for subscription to the full edition; and $1.00 a year, of which $.50 is for subscription to the limited edition. Reduced group membership fees are available for students, members of trade unions, unemployed groups, consumer clubs and other organizations. Application for entry as second class matter at the postoffice at Long Island City, N. Y., is pending.

Arthur Kallet, *Director;* D. H. Palmer, *Technical Supervisor.*

COPYRIGHT, 1936, BY CONSUMERS UNION OF UNITED STATES INC.

1937 RADIO RECEIVERS

Ratings of low and medium priced receivers of leading makes show that some manufacturers make both good and bad sets; new models represent generally better values than previous years' sets, with some low priced sets showing outstanding performance.

OUT OF THE BALLYHOO OF MAGIC EYES, magic voice, phantom tuning, visoglo, photo-tone, focused tone, sentry boxes, acoustic labyrinths, colorama tuning, centromatic control and automatic maestros, one fact does emerge: that the radio manufacturers, in general, are putting greater value per dollar into their 1937 lines. This does not mean, however, that any model made by any reputable manufacturer can be purchased with the assurance of getting one's money's worth. Indeed, the same manufacturers are putting out both good and bad sets.

How Many Tubes?

Radio receivers have always been judged largely by the number of tubes they contain. With the advent of the multipurpose tube, the actual number of tubes in a receiver has become less significant as an indication of performance.

Nevertheless, one still cannot expect really satisfactory reception with less than six tubes. If an electronic or "magic eye" tuning indicator is featured, the minimum requirement is *seven* tubes since most manufacturers count the tuning eye as a tube. In receivers designed to operate on either alternating or direct current, where a "ballast" tube is used, it cannot be considered as contributing to the set's efficiency. It functions merely as a resistance—a part of the power supply system—and has nothing to do with the selectivity, sensitivity or quality of reception.

Many manufacturers advertise 12, 18, and 24 tube receivers, claiming extraordinary performance because of the number of tubes used. While additional tubes are necessary for such features as automatic frequency control, volume expansion, highly effective automatic volume control and tuning indicators, additional tubes beyond 10 or 12 tubes can add little to the usable sensitivity or selectivity of a radio set. Extra tubes do make a good selling point. They can be, and sometimes are, used in unimportant or almost dummy positions in the circuit. Often they are used to make a sound system capable of giving extremely great volume, enough for a good sized theatre. The fifteen or twenty watts of output power provided can almost never be used in the home. Five or six watts is more than adequate and still smaller volumes are sufficient for apartment house use.

Size Is Important

Regardless of the number of tubes, excellent tone quality cannot be obtained from radio receivers without an adequate "baffle" or frontal area. For really good tone a receiver should not be smaller than the largest table models, which have a frontal area of nearly three square feet. This stipulation automatically rules out practically all of the so-called midget and "personal" receivers as musical instruments. They may provide plenty of entertainment and good quality on voice, but they are not to be compared with the larger sets for faithful reproduction of the full range of musical tones.

Most of the 1937 model receivers use metal tubes or glass tubes which have the same eight-prong (octal) base as the metal ones and the same characteristics. The same numbers are used to identify both, except that the glass tubes carry the letter G before or after the type designation. Thus a 6H6 is a metal tube. The 6H6-G is the same tube with a glass envelope. With the metal tubes now at a high stage of perfection, there is little or no choice between the two types.

Wave Bands

Almost all but the very cheapest receivers feature all-wave coverage (from around 15 meters to 550 meters, or 20 megacycles to 545 kilocycles) or semi all-wave coverage (170 to 550 meters and 20 to 50 meters—i.e., 1800 kilocycles to 545 kilocycles and 15 to 6 megacycles). Some receivers have one or two additional bands, one going down to 5 meters (60 megacycles) and one up to 2000 meters (150 kilocycles). These extra bands may provide sales ballyhoo, but they are practically devoid of entertainment value. In most locations, nothing will be heard on the very short wave band, partly because of the inefficiency of all-wave receivers on this band. For ninety-nine percent of all listeners, however, there is nothing on this band worth hearing. As to the long-wave band, in the United States nothing is likely to be heard but sporadic weather reports for airplanes (never local unless you live near a commercial airport), the monotonous beat of aircraft radio beacons, and occasional code.

Automatic frequency control is another innovation of dubious value. Many 1937 sets feature "a.f.c." (under a wide variety of names), but usually have the same set without automatic frequency control. A.f.c. is never worth the difference in price—if it possesses any virtues at all, which is a moot point. Automatic frequency control eliminates distortion when a station is tuned only approximately. It often makes it difficult, however, to tune out a powerful station to get an adjacent weak one, and, moreover, distortion can be eliminated anyway by accurate tuning by ear or by means of a visual tuning indicator.

Volume Expansion

Some of the more expensive 1937 models feature volume expansion—a system which provides greater amplification for loud sounds than for weak ones. Broadcasting stations sometimes cut down the intensity of loud sounds to prevent overloading their transmitters; this is also done on phonograph records. Volume expansion is intended to make up for this. Volume expansion is not essential, but it does contribute somewhat to the illusion of reality. It cannot correctly restore the original balance of sound, however, because a very loud passage on the part of any one voice or instrument in a musical ensemble will bring up the sound of the entire ensemble. Volume expansion also results in lowered background noise, both on radio and records (mostly needle scratch in the latter), since the amplification is automatically lowered on sounds of low intensity, where background noise is especially noticeable. Volume expansion *is* a desirable feature, but its virtues are over-touted by its more ardent advocates in the manufacturing field. It is by no means a necessity.

Tone quality differs, without justifiable excuse, from one make to another, due largely to variations in the methods of tone compensation (see definitions). Practically all 1937 receivers—even the smallest—will give great enough volume for ordinary use in a room of average size. Good loudspeakers are available which, in conjunction with properly designed amplifying systems, reproduce both bass tones and high treble without the use of supplementary small "tweeter" speakers for the high notes.

Many receivers have a "high-fidelity" adjustment whereby tuning can be broadened to get the full effect of the higher notes of a high-fidelity local station. Other receivers achieve, or attempt to achieve, this effect by treble tone control. In the opinion of Consumers Union radio consultants, the broad tuning arrangement, independent of the treble adjustment, is preferable.

Separate bass and treble tone compensation—rather than a single tone control—is found on some of the more expensive receivers. This is an innovation of real merit. No two phonograph records are made, and no two broadcasts are transmitted, with the same balance between the loudness of bass and treble notes, and it is *only by individual adjustment* of bass and treble that the closest approach to fidelity or to the desired quality can be obtained.

Various forms of resonance and anti-resonance chambers have been incorporated in radio cabinets in an effort to improve tone. While they may do some slight good, they are still little more than selling points. A high-grade receiver does not require special resonance chambers for good reproduction.

Magic Eye

Tuning indicators, which actually are of considerable value, are omitted even from some of the higher priced sets. The most satisfactory of the visual tuning devices is the electronic or "magic eye." Not all "magic eyes" work satisfactorily, however. In some receivers, they are altogether useless on anything but the most pow-

MIDWEST RADIO CORP.
BUILDERS OF QUALITY RADIOS SINCE 1920

905-11 BROADWAY
CINCINNATI, OHIO, U.S.A.
PRIVATE TEL. EXCHANGE
PARKWAY 6657

CABLE ADDRESS MIRACO ALL CODES

Midwest Parades the Nations Before You!

Dear Radio Friend:

The 1937 Midwest radio you recently purchased is undoubtedly bringing you newer and richer radio enjoyment than you have ever experienced before. Its advanced design and many exclusive features enable you to enjoy new beauty of tone, new depth of color and new faithfulness of reproduction. More than likely your Midwest has already won many compliments not only from members of your family... but from your friends and relatives. People exclaim enthusiastically over the appearance of Midwest radios and delight in their marvelous performance.

I wish you could see the letters that pour into my office every day...not only from every State in the Union, but from countries all over the world...letters that enthuse over Midwest's super-performance. Midwest owners write about the new, life-like, crystal-clear tone of their sets; they delight in the ability of their radios to pull in the world's most distant station...night through locals.

I will send you a special SURPRISE gift, if you will write me soon and tell me how your set performs and how much you like it. May I suggest that you cover points like these in your letter: Reception range...number of domestic and foreign stations that you heard clearly...comparison of the Midwest with other sets you have either owned or heard...comments of friends...your interest in the various types of broadcasts it brings you...comparison with more costly sets in beauty, performance, tone quality, what you think of Midwest's outstanding features, etc.

Send your letter soon...and I will immediately mail you the SURPRISE gift I told you about. If you will take a photograph of yourself standing or sitting alongside the set...tuning it...or showing it to your friends...I will show my appreciation by sending you an EXTRA SPECIAL GIFT. It is understood, of course, that I will have your permission to print or reproduce your letter and photograph in Midwest advertising.

I'm looking forward with keen interest to your letter.

Very sincerely yours,

MIDWEST RADIO CORPORATION

A. G. Hoffman

AGH:JC

President.

Dear Midwest Radio Corporation:
BAD A-C HUM; SENSITIVITY ON SHORT WAVES IS POOR; CODE INTERFERENCE BAD.
CONSUMERS UNION

erful stations. Where they are properly engineered into the circuit, however, they are highly sensitive and of aid even on very weak signals.

The Philco shadow tuning system is also very effective. Little can be said for the other visual indicators now in use.

The 1937 model receivers are economical in current consumption, averaging about ten watts per tube. If you want a rough estimate of how much it costs you to operate a receiver per month, multiply the number of tubes in the set by 10. Then multiply by the number of hours the receiver is used per month. Divide this answer by 1000, and multiply by your electric light rate in cents per kilowatt hour. For instance, a 6 tube set, operated 120 hours a month (4 hours a day) at 5c per kilowatt hour, will cost about:

$$\frac{6 \times 10 \times 120}{1000} \times 5 = 36c \text{ per month}$$

Consumers Union reports on radios are prepared as a guide to the prospective purchaser, rather than as arbitrary recommendations. The main thought is to assist the reader in making a wise choice by indicating acceptable and non-acceptable models and relative qualifications. The prospective purchaser should be sure to insist on a personal demonstration, preferably in his own home. He should have a clear understanding with the dealer, in writing, that he may return the receiver after a short trial if it is not satisfactory, and the terms of the guarantee should be thoroughly understood by both seller and customer. Many dealers will permit the customer to try out the receiver in his own home for a period of thirty days. Guarantees, except on radios sold at greatly reduced prices, usually cover breakdowns within ninety days of purchase. The prices given in this report are regular list prices. Many radio stores, especially in larger cities, sell practically all models at reduced figures.

Radio Receivers

Best Buys

Silvertone Cat. No. 4465 (Sears, Roebuck and Co., Chicago). Also available through Sears Roebuck retail stores. Price $34.50 complete with open type antenna and eight octal base glass tubes. A-c only. Large vertical table model.

This receiver is advertised as an eight-tube set. Since one tube is the 6G5 "tuning eye," however, it must be classed as a seven-tube receiver.

In general all around performance, this instrument probably represents as high a value per dollar as has ever been built into a radio set. It is an all-wave receiver covering from 18 megacycles (17 meters) to 540 kilocycles (550 meters) in three bands. The set tested had satisfactory sensitivity and adequate selectivity. The automatic volume control action is excellent. Background noise is definitely lower than with any of the other receivers in the same price class. It gives satisfactory foreign reception under favorable conditions—a stipulation which must be made with any receiver. The tone control has adequate range and is continuously variable, a type definitely preferable to the two-, three-, and four-step controls. The set permits either high fidelity or sharp tuning, and there is a noticeable difference both in sharpness (selectivity) and in tone between the settings of the two-position switch. It has five control knobs: on-off switch and volume, wave range, station selector, sharp and broad tuning, and tone control. The electric eye works satisfactorily on strong but not on weak stations.

Despite its relatively small dynamic speaker (six inches) the tone quality of this receiver is good, comparing favorably with that of receivers costing several times as much. The rated distortionless power output is three watts, which is adequate for a large room.

The receiver is as well built mechanically as it is electrically and shows careful workmanship—which is more than can be said of many receivers in higher price brackets. The cabinet is of good design and is well finished.

Criticisms of the set are of a minor nature. The facility with which the dial can be read has been partially sacrificed to ornamentation. More leverage could be provided to the wave-band switch, and both this switch and the sharp and broad tuning switch might be better marked to make it easier to tell their positions at a glance.

Silvertone receivers are made for Sears, Roebuck and Co. by several manufacturers. It is therefore possible that other sets will not perform as well as the one tested. They are, however, made to the same excellent specifications, and there is evidence of careful inspection.

Silvertone Cat. No. 4485 (Sears, Roebuck and Co., Chicago). Price $42.50. Console model.

This receiver differs from the number 4465 only in the cabinet and in the employment of a larger, eight-inch dynamic speaker. The tone quality should be improved by the use of the larger speaker, plus the additional baffle provided by the console cabinet.

Crosley "Fiver" Model 126 M (Crosley Radio Corporation, Cincinnati, Ohio). Price $19.99. A-c only. Five tubes. Small table model.

Size and price considered, this is an excellent value in circuit, selectivity, sensitivity, tone quality, and flexibility of controls. It has two wave bands: American broadcast and semi-short-wave. The latter includes police stations and amateurs —practically no foreign reception and little of interest to most purchasers. A two position tone control contributes to quality, which is not at all poor for so small a receiver. Sensitivity is excellent, and the receiver can be operated satisfactorily with a short indoor antenna.

Emerson Model 126 (Emerson Radio and Phonograph Corporation, NYC). Four tubes plus ballast tube. Price $14.95. Ac-dc operation. Small horizontal table model.

This receiver is classed as a Best Buy because of the excellent value it represents at the price. Obviously it is not a musical instrument, but

Best Buys (continued)

the tone quality is better than that of most midgets, and about as good as can be expected for the size. A built-in antenna is included. (A built-in antenna consists of about twenty feet of flexible wire which must be stretched from the receiver, preferably to its full length, in the most convenient direction. Care should be taken not to run it directly across and close to the back of the receiver. An additional wire, such as an outside aerial, can be attached to the built-in antenna for better reception.) Covers the American broadcast and state police stations—550 to 1700 kilocycles. Electro-dynamic speaker and line noise filter. The cabinet is bakelite in imitation walnut.

The noise level of this receiver can usually be reduced and reception improved by grounding the set (connecting chassis to ground) through a one microfarad condenser. Any serviceman should make this connection at a nominal cost.

RCA Victor Model 7X (RCA Manufacturing Co., Inc., Camden, N. J.). Price $49.95. Ac-dc operation. Six tubes plus ballast tube. Vertical table model.

This is an excellent receiver, employing six active tubes. It is not as good a buy as the Silvertone but unlike the Silvertone may be operated on d-c as well as a-c current. There is no tuning indicator and no pre-selection. However, a wave trap is included to eliminate spurious signals.

Good tone quality with adequate tone control and an 8-inch speaker. Frequency range 22,000 to 530 kilocycles in three bands. Provision for phonograph pickup.

American Bosch Model 620 (United American Bosch Corporation, Springfield, Mass.). Price $49.95. Ac-dc operation. Six tubes plus ballast tube. Horizontal table model.

Priced exactly the same as the RCA 7X, there is little difference in value between the two receivers.

The *American Bosch* Model 640 ($47.95) is a 6 tube receiver for a-c only, housed in the same cabinet with the same band range; not as good a buy as the *Silvertone*, however.

All wave reception, covering a slightly more limited range than the *RCA* 7X, from 540 to 4,500 and 5,500 to 16,500 kilocycles. No provision is made for phonograph pick-up.

Also Acceptable

General Electric Models E-61, E-62, and E-68 (General Electric Co., Appliance and Merchandise Department, Bridgeport, Conn.). Prices respectively $29.95, $34.95, and $44.95. A-c only.

These are six tube receivers, employing the same chassis. They deserve consideration especially as a combination of simplicity and good results at low cost. Some image frequency interference may, however, occasionally be encountered. A wave trap is included to eliminate certain interference. There are two wave bands covering from 540 to 1720 and from 2200 to 7000 kilocycles. This range will not provide for foreign day-time reception, and permits night-time foreign reception only in the highly congested 49-meter band.

Controls are: off-on switch and volume, band selection, tuning, two position tone control.

Model E-61 is a medium size upright table model with an 8-inch dynamic speaker. Model E-62 is a horizontal type table receiver. The shape of the cabinet makes necessary the use of a smaller speaker—a 6½-inch dynamic. The E-68 is a console, employing a 12-inch speaker.

RCA Victor Model 10-T (RCA Manufacturing Co., Inc., Camden, N. J.).

Terms Used

Automatic Volume Control: a device for automatically maintaining approximately equal volume on all stations for a given setting of the volume control. It is generally included on all receivers except those in the very low price ranges, but its inclusion is no guarantee of its efficiency. If it is properly designed, fading should be minimized and there should be no blasting or annoying changes of volume when one tunes from a weak station to a strong one or vice versa.

High Fidelity: the reproduction of music or voice with the same balance of high and low notes as present in the original program. Not all stations can transmit *extreme* high and low frequencies. A high fidelity receiver must be able to reproduce both the extreme highs and lows with approximately the same balance as sent out from the station.

Image Frequency Interference: persistent squeals and whistles found in some sets at definite points on the dial, often preventing satisfactory reception from one or more stations. It is prevented in well designed receivers through "preselection."

Preselection: the incorporation in the receiver of a special circuit to sharpen tuning (thus decreasing various types of interference) and increase sensitivity.

Selectivity, or sharpness of tuning: the ability to select the desired station without interference from adjacent ones on the dial.

Sensitivity: refers to the ability of a receiver to give satisfactory volume on weak signals from low-powered or distant stations.

Tone Compensation: the design of a receiver to give approximately correct balance of bass and treble.

Tone Control: a device for manually changing the balance of bass and treble over *part* of the range of sound, thus emphasizing or weakening certain notes (usually the high tones). Automatic tone control boosts the response on bass and high treble notes when the receiver is operated at low volumes to compensate for the inability of the ear to hear these notes at very low volumes.

Wave trap: a circuit designed to reject a particular interfering signal. Most modern receivers require a wave trap if no preselector is used.

Price $109.95. A-c only. Ten tubes (nine plus tuning indicator). Large vertical table model.

There is no questioning the excellence of this table model receiver, but the price is higher than it should be.

The performance of this receiver is satisfactory in every respect. Five watts undistorted output with excellent tone—the combination of music-speech and fidelity controls providing somewhat independent compensation for bass and treble. Phonograph connections. Five tuning ranges—150 to 410 kilocycles (long wave) in one band and from 530 kilocycles to 60 megacycles in four bands.

The same receiver can be obtained in a console cabinet, Model 10K, with a larger speaker (12-inch instead of the 8-inch in the 10-T) and a boom eliminator (the "magic voice"). Price $150.00.

Philco Model 84-B (Philco Radio and Television Corporation, Philadelphia, Pa.). Price $20.00. A-c only. Four tubes. Table model.

This receiver should be compared with the Crosley *"Fiver"* listed under *Best Buys*. Though no tone control is provided, the tone quality is slightly superior to the Crosley. The sensitivity, however, is very low. The dial is directly driven, which makes tuning somewhat difficult (as compared with an indirectly driven tuning mechanism). The appearance of this instrument, due largely to superior cabinet work, is pleasing. There are only two controls, one for tuning, and one for volume, which includes the on-off switch. This set would be a *Best Buy* for a person living in a relatively noise-free district who could erect a good outdoor antenna (at least 50 feet not including lead in) and who is interested mainly in American broadcast reception from reasonably nearby stations.

Midwest 16-Tube 1937 Receiver (Midwest Radio Corporation, Cincinnati, Ohio). Price $49.95 (chassis). A-c only.

This is the receiver widely advertised, at the price mentioned above, as the choice of the movie stars. But this price is without tubes or cabinet, and the cheapest complete receiver is the Model S-16, in a console, at $102.50. Five bands are covered—from 135 kilocycles to 33 megacycles, with the usual skip in the neighborhood of the intermediate frequency (about 400 to 500 kilocycles). Again, the highest and lowest bands hold little worth listening to.

The tone of this receiver is good—though the controls are inadequate to maintain high quality over a large variety of programs. The dial and control arrangement is very ornate. The tuning indicator is unsatisfactory, particularly when the "electrik-saver" (a device which lowers current consumption after the tubes have become heated) is used.

Many users are undoubtedly pleased with this receiver. Nevertheless, a preliminary personal inspection—where Midwest maintains show rooms—is recommended in preference to blind purchase by mail, despite the thirty-day free trial offer.

Ansley Radio Dynaphone Models D-10 and D-16 (Ansley Radio Corporation, NYC). Prices, respectively, $84.50 and $99.50. Six tubes plus ballast tube.

Both of these models are radio-phonograph combinations operable from a-c and d-c without changes. The same superheterodyne receiver is employed in both combinations, tuning, in two bands, from 5900 to 15,500 kilocycles (foreign day and night reception) and American broadcast. We are informed that by December 1 the manufacturer will have made several changes in the radio chassis which should improve operation. Model D-10 is of the table type (not portable) and D-16 a console with a larger speaker providing definitely superior quality. Takes up to twelve-inch records. Crystal phonograph pick-up.

Cabinet work is exceptionally fine in these two models.

Marconiphone Models B and D (Marconiphone Company, 679 Madison Ave., NYC). Prices, respectively, $89.50 and $139.50.

Ac-dc radio-phonograph combinations. Six-tube radios, covering the same wave bands as the *Ansley* combinations. Dual tone controls contribute to good tone. Both models are portable, and they are the same except that Model D has an automatic record changer, accommodating eight ten-inch or seven twelve-inch records. Crystal phonograph pick-up.

American Bosch Model 610 (United American Bosch Corporation, Springfield, Mass.). Price $34.95. Ac-dc operation. Five tubes plus ballast tube.

The Bosch 610 is a "personal" receiver, covering the American broadcast band and the none too entertaining channels between 2000 and 7200 kilocycles.

Air King Model 1001 (Air King Products Company, Brooklyn, N. Y.). Price may vary from $10.00 to $14.50. Ac-dc operation. Four tubes. Small horizontal table model.

All tubes are active in this receiver—a resistance in the power line taking the place of the usual ballast tube. It is superior to many of the low-priced midget sets, comparing favorably with the *Emerson* 126. The bass reception is definitely inferior; the higher tones are slightly better. The *Emerson* has a superior dial, but the *Air King* showed better sensitivity. Its selec-

> There is definite electrical shock hazard connected with the operation of radio receivers from electric power lines. Most a-c receivers are designed to be grounded, preferably to a water pipe. Ac-dc receivers should *not* be grounded except through a condenser since the metal parts of the chassis are connected directly to the power line. There is serious shock hazard in the operation of the ac-dc receivers where metal parts are exposed, especially if small children may come in contact with them. Except for openings for ventilation, the cabinets should be completely enclosed. Especial care should be taken not to change tubes or make adjustments while the receiver is connected to the electrical outlet, since high voltage connections are often exposed, from which one may get a serious shock.

Also Acceptable (*continued*)

tivity is fair, but inadequate to eliminate bad interference from local stations. Covers American broadcast band and state police broadcasts. Built-in antenna.

Remarks concerning the *Emerson* in reference to antenna and ground apply also to the *Air King*.

RCA Victor Models 5X, 5X3 and 5X4 (RCA Manufacturing Company, Inc., Camden, N. J.). Respective prices: $32.95, $29.95, and $27.95. Ac-dc operation. Five tubes. "Personal" radios.

The same chassis is employed in these three receivers, the cabinet determining the price. A wave trap is included to reduce code interference. The main objection to this receiver is the fact that the loudspeaker is mounted at the back, and radiates from the rear. The set cannot therefore be placed close to a wall. At a judicious distance from the wall—about eight inches—rather good quality is obtained.

These are all very small receivers, each of them measuring about nine inches high, a foot in width, and six inches deep.

There are two wave bands—American broadcast and semi-short wave—from 540 kilocycles to 6,500 kilocycles.

Philco Models 620-B and 620-J (Philco Radio and Television Corporation, Philadelphia, Pa.). Prices respectively, with *Philco* octal-base glass tubes and *Philco* all-wave foreign reception antenna system, $52.50 and $69.95. Both are a-c only.

Model 620-B is a six-tube receiver in a table model, giving satisfactory results for the number of tubes used. Tone is acceptable, with three-position tone control. Coverage with three wave bands is from 530 kilocycles to 22 megacycles, with a skip band between 1720 and 2000 kilocycles.

The same chassis is used in the Model 620-J, where it is mounted in a console with a larger speaker.

Philco Model 675-X De Luxe (Philco Radio and Television Corporation). Price with tubes and antenna system $169.50. A-c only. Twelve tubes. Console model.

Model 675-X De Luxe is an all-wave receiver tuning from 530 kilocycles to 18.2 megacycles in five bands, and featuring a band-spread dial, automatic tuning, magnetic tuning (automatic frequency control), and twin tone controls. The dial is exceptionally good and contributes greatly to the ease of tuning. There is no tuning indicator, probably because it is considered unnecessary with automatic frequency control. Provision, however, is made, as it should be, for turning off the automatic control. This receiver should be considered as an eleven-tube set, one tube functioning solely in the magnetic tuning circuit.

Automatic tuning (not to be confused with magnetic tuning) is an interesting gadget which makes it possible to tune in pre-set stations much as one operates a dial telephone. Hardly, however, worth the increase it represents in the price of the receiver—and the same applies to automatic frequency control. Model 675-X is the same receiver as the De Luxe, without the automatic tuning dial, at $150.00.

Individual bass and treble controls make it possible to obtain very high quality on all programs providing transmission-reception conditions are satisfactory.

The cabinet work on *Philco* is excellent—above average. The same, however, cannot be said of the mechanical details of the chassis.

Not Acceptable

Airline Mail-Order Catalog No. P 462 C 418 (Montgomery Ward, Albany, N. Y.). Price $39.95. A-c only. Eight tubes. "Mantel" model—horizontal type.

Advertised as an eight-tube receiver, it has seven-tube performance, as one tube is the tuning indicator. Tone quality only fair. Hum level high. Dial calibration is spotty (good in one place, excessively off in another). Wave-band switch very hard to operate. "Magic eye" insensitive and useless.

The above conclusions could be arrived at only after the set had been put in operating condition. It arrived with three unsoldered connections, three connections that required resoldering, and one grid lead completely missing. Obviously this receiver had never been adequately inspected, and certainly never tested—by the manufacturer who made it for Montgomery Ward, or by Montgomery Ward. Such laxity necessarily suggests service troubles on the entire Montgomery Ward line, even when sets are received in an operable condition. It seems logical, however, that such utter indifference to the operability of a product must be corrected in the near future.

Nevertheless, the unfavorable characteristics of the model purchased stand, and apply equally to the console model, Catalog No. P 162 C 408, price $49.95, which employs the same chassis. It is probable that the larger speaker and baffle area in the console model will improve quality, but at the same time the hum level will be raised.

Philco Models 610-B, 610-J, 61-B, and 61-F (Philco Radio and Television Corporation, Philadelphia, Pa.). Respective prices—$42.50, $59.95, $37.50, and $49.95. A-c only.

The 610 series is a five-tube chassis with three tuning ranges, the 610-B a table model and the 610-J a console. The 61 series is similar but has only two tuning ranges, the 61-B a table model and the 61-F a console.

In contrast with other receivers in the same price class, these sets are considered poor value for the money—in everything but cabinets. They are inferior to similarly priced sets in tone, selectivity, and sensitivity.

Pilot Model 293 (Pilot Radio Corporation, Long Island City, N. Y.). Price $74.50. A-c only. Seven tubes. Vertical table model.

A six-tube plus tuning eye, all-wave receiver, but with a skip-band between 1700 and 2000 kilocycles. Considerable interference and poor tone. Distortion results from overloading of the speaker. Sensitivity good, but over-all performance below its price class. Console model C-293 at $99.90 has same chassis with larger speaker which should improve tone and reduce distortion.

RCA Victor Model 4-T (RCA Manufacturing Company, Inc., Camden, N. J.). Price $20.00. A-c only. Four tubes. Small table model.

This model incorporates all the undesirable features of the *Philco* Model 84-B without any of its redeeming qualities. The tone quality is only fair. Bad code interference.

Midwest Ac-dc Seven-Tube All-Wave Receiver, Model 7-37 (Midwest Radio Corporation, Cincinnati, Ohio). Price: table type, $29.95; console, $49.95.

These receivers are characterized by a bad a-c hum when operated on alternating current. Tone quality fair in the table model—good in the console. The dial is confusing, and inaccurately calibrated. Sensitivity on short waves is poor. Code interference bad on the intermediate frequency unless a wave trap is purchased at extra cost.

Labor in the Radio Plants

THE RADIO MANUFACTURING INDUSTRY presents a chaotic picture of skyrocketing sales records and lush profits against a background of low pay, cruelly long working hours, and bankruptcies. The trend today is for concentration of production in the hands of a relatively few large manufacturers, and for an upward stabilization of the wage level at a point somewhere near the minimum required for a family's existence.

Wages have been so inadequate that skilled mechanics from the layoff lists of the American Telephone and Telegraph Company have, upon entering the radio industry, taken an active part in organizing. Among trade unionists this is considered exceptional, since the relatively high pay and the vacation and pension plans of the telephone company have made the average employee indifferent to the benefits of collective bargaining.

Wages and Profits

As in other industries, the rise in wages has lagged far behind the increase in profits during recent months. The average weekly wage for radio and phonograph workers was $18.69 in the first half of 1935. For the same period this year the average was $19.18, a gain of 2.6 percent, while radio sales improved 30 percent and the profits of one large manufacturer of electrical goods (General Electric) jumped 53 percent. Other big producers reported gains almost as large, and the outlook for 1937 is still more encouraging.

The employee has anything but security. Peak production in this seasonal industry lasts for about three months during the fall, although the busy period has been stretched in many factories to six or eight months. The worker who is laid off during the slack season must find odd jobs or try to exist on relief.

Even when working, his average wage of slightly less than $20 is hardly enough to provide opportunity for enjoying the American standard of living. By the common rule, this means that rent must be held to about $20 a month. In New York City and Philadelphia, two principal centers of radio manufacturing, that sum will buy one fair-sized room in a tenement house, where the family must cook, eat, and sleep. Bathroom facilities will be found in the hall, if not in the yard. Obviously the radio worker is in no position to purchase a modern set for his family's enjoyment.

To add to the insecurity of radio workers, the industry has a startling record of failures. Starting a mushroom growth around 1922, it underwent a crisis about 1925 in which some 60 percent of the 188 manufacturing concerns went under. Each year since has seen at least 20 percent of the firms doing business disappearing, many of them being replaced by new companies. With the gradual concentration of radio manufacturing in the hands of a few large corporations, however, the yearly number of failures has decreased.

Women Workers

Women are employed in large numbers, primarily because they work for less than men, secondarily, perhaps, because they are not yet so apt to organize for collective bargaining. The Philco plant has about 25 percent women, while at General Electric the number is much more than half. Usually the women are assigned to lighter work—lighter in the sense that they are not required to perform heavy manual labor, but nevertheless work subjecting them to considerable strain and fatigue.

Approximately 50 percent of the radio workers are unionized. The best known contract is that of the United Electrical and Radio Workers with the Philadelphia Storage Battery Company, manufacturers of *Philco* radios. It provides for a 36-hour week, contrasting with the 60- to 70-hour weeks in some non-union factories; a 44-cent hourly minimum for women after six weeks, and a 56-cent minimum for men, with time and one-half for overtime.

Although relations between Philco and the union have apparently been satisfactory to both sides, most other manufacturers have shown marked antipathy for dealing collectively with their employees. The Crosley Company, following a strike in the spring of 1935, became so violently opposed to trade unionism that it clamped down a strange censorship on WLW (Cincinnati), the world's most powerful radio station. "No reference to strikes

"Consumers Union Reports are creating a sensation in our town," writes one member. Treat your friends to a sensation by giving them a year's membership in Consumers Union as a Christmas gift. You can start their gift membership with this issue or with any back issue (the first issue was May, 1936). Send in $3 for each gift membership, with the name and address of each recipient, and your name and address. A gift card bearing your name as the donor will accompany the Reports. For an extra 50c ($3.50 in all for each gift membership) the Reports will be sent in a special binder, made to hold 18 issues. The gift memberships will bring not only the monthly Reports, but also, early in 1937, the Annual Buying Guide, which is now in preparation.

is to be made on any news bulletin broadcast over our station," was the order issued.

A few days later the censorship was broadened to include student walkouts, such as peace strikes. Queried by newspapermen, Crosley officials denied that there was such an order despite the existence of documentary evidence to the contrary.

The Plants

Notes on labor conditions in the various plants follow:

Air King. The company has a 100 percent union shop, operating under contract with the Radio Factory Workers' Union, affiliated with the American Federation of Labor.

Ansley. This company also has a 100 percent union shop contract with the Radio Factory Workers' Union.

Bosch. The factory has been well organized by the United Electrical and Radio Workers' Union, and negotiations have reached the stage where recognition is being considered by the management. A number of active union members have been discharged in the past; reinstatement has been won, however, for all but two of them.

Crosley. A bitter and potent foe of unionism, known for low pay. Some survivors of the 1935 strike are still at work, but the plant is almost completely non-union. The Crosley management, with the help of strikebreakers and thugs, successfully fought the strikers' demands for time and one-half pay for overtime, a half-day's pay when called to the factory and sent home without work, and weekly pay instead of checks three times a month.

Emerson. Wages at the Emerson factory are so low that even inspectors receive barely $21 a week—when enough work is on hand to allow them a full work week. When the company moved to new quarters in 1934, it left 300 skilled workers behind, in order to break up their union. Inexperienced women were hired as substitutes. The company has ignored orders of the National Labor Relations Board for reinstatement of union members. It employs a "detective" agency for espionage work among the employees.

General Electric. Working conditions at the Bridgeport factory are far from satisfactory. Employees are driven at a grueling pace throughout the day. Pay for girls is as low as $9 a week. General Electric prefers to deal with its own company union, but it does not resort to gangster technique in opposing bona fide unionism. Outright discharges of active members of the Radio and Electrical Workers' Union are avoided; instead, the men are transferred to other GE factories, sometimes with an increase in pay.

Marconi. This factory is open shop, with wages and working conditions that are typical of plants where unionism has not been strongly established.

Montgomery Ward Airline. Made by various manufacturers, and Consumers Union can give no definite information on the labor conditions under which the radios Montgomery Ward sells are made.

Midwest. Another open shop.

Philco. Wages and working conditions in the big Philadelphia factory of this company are probably the best in the industry, thanks to contractual relations with the United Electrical and Radio Workers' Union.

Pilot. An anti-union company. Testers (highest skill required) get as little as 40c an hour, or $19.20 a week—when they are able to get work for the full 48 hours. Last year the company laid off union members and pointedly failed to rehire them.

RCA. This large corporation has a policy of handling trade unionists with brass knuckles instead of the kid gloves preferred by General Electric. When workers at the Camden factory struck last summer to get a 20 percent pay rise, a 35-hour week, two-week vacations with pay, and a closed shop, notorious strikebreakers were hired to smash the union. Scores of strikers and sympathizers were beaten, arrested, and jailed, with exorbitantly high bail fixed. The strike was settled by an agreement for an election under Labor Board supervision to determine who should represent the employees in collective bargaining. By a majority of almost 60 to 1, the company union was defeated and the United Electrical and Radio Workers' Union was certified as the spokesman. As a result of the strike, wages at the RCA plant are now comparable with those paid by the Philco manufacturers.

Sears Roebuck Silvertone. These radios are made by various manufacturers, including Colonial Radio Corporation, who have recognized the United Electrical & Radio Workers' Union as the bargaining agent for their workers although the plant is not a closed shop. Wages and working conditions in this plant are fairly good. Consumers Union has no information on conditions in other plants making radio sets for Sears Roebuck.

Vacuum Cleaners and Men's Socks

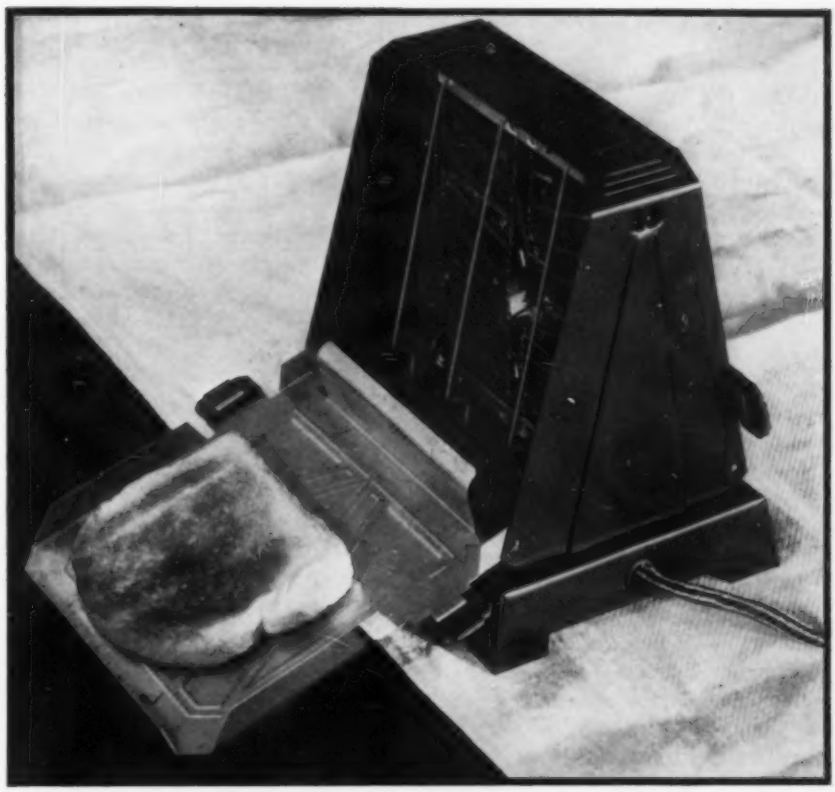
The report on vacuum cleaners originally scheduled for this issue will appear in the December issue. A greater amount of time than anticipated has been required to complete the tests. For this reason the report is delayed.

A report on men's socks was announced for the October issue and then postponed to November. It is necessary again to postpone publication of this report for two or three months. Actual wear tests were completed on over forty pairs of socks of many different brands. Unfortunately the tests failed to reveal a single brand of outstanding quality which is generally available in retail stores. Since the report on the brands already tested would, therefore, have comparatively little value to most Consumers Union members, further tests on other brands are being started at once. The report will not be made until good buys have been found among brands which are widely distributed.

For those who buy from mail order houses, there are a few good values in silk socks. The best is the *Korker* No. 86 D 305 (Sears, Roebuck and Co., Philadelphia), 35c, 3 pairs for $1. Other good buys are *Sears* No. 86 D 1908 (Sears, Roebuck and Co., Philadelphia), 23c, 3 pairs for 65c; and *Ward's* No. 30 B 640 (Montgomery Ward, Baltimore), 24c.

ELECTRIC TOASTERS

A report on 18 automatic and non-automatic models



BAD DOORS, BAD HANDLES, BAD FEET.
And bad toast.

EVERY ELECTRIC TOASTER, WHETHER it costs fifteen dollars or less than one dollar, will make toast. But they are not all good toasters.

Some brown the middle of a slice of bread and leave the bottom or sides almost untouched. Some have handles which get so hot that they can't be touched without the risk of a burn. Some get hot enough underneath to ruin a painted or varnished table top.

Requirements

Electric toasters, both automatic and non-automatic, to be acceptable, should meet at least the following requirements:

1. Handles should be so placed and designed that they will not become excessively hot, and they should be large enough so that one will not be likely to touch hot metal when opening or closing the toaster. Several toasters in the test had very badly designed handles.

2. The doors should be so designed and so hinged that the toaster can be opened and the bread turned easily without upsetting the toaster.

3. The doors should have stops to keep the hot metal from touching the table top.

4. The toaster should have non-metal, heat-insulating feet to protect the finish of the table top. Most of the non-automatic toasters had black-enameled bases which radiated much more heat directly to the table than would chrome or nickel plate.

5. Electric insulation should be adequate to prevent excessive current leakage.

6. The heating unit should be designed and placed so as to toast an entire slice of bread uniformly without blacking any of the edges or leaving parts untoasted. If the heater wire is to be durable, it should operate at a dull red color or at the most, a "cherry red." If the wire heats to a bright yellow or lemon color, it will burn out rapidly.

A slow toasting rate gives toast which is crisp through and through, while rapid toasting leaves the center of the bread soft.

Removable crumb-trays are probably the best solution to the cleaning problem, but they are used on only two of the toasters listed.

Fully automatic toasters remove the guesswork from toast-making either by ejecting the toast or shutting off the current, or both, automatically. Semi-automatic toasters turn off the electricity, and in some types ring a bell or flash a light when one side of the toast is done, so that it can be turned over by hand. Some of the automatic toasters are expensive, and all are considerably more complex, with greater opportunity for electric current leakage and service troubles.

Cords

Rayon appliance cords may be more attractive than cotton ones, but they do not resist abrasion as well and are apt to fray much sooner. Unless otherwise stated, cords used on these toasters are covered with part rayon and part cotton, which is somewhat better than rayon alone but still inferior to all-cotton. Several of the cords were attached permanently to the toasters; properly attached, they are as satisfactory as a detachable plug.

Electric Toasters

Prices given in the following ratings are the manufacturer's list or recommended retail prices; power is the rated watt-consumption while the toaster is in operation; all toasters operate on 110-120 volts, alternating or direct current, except where otherwise noted:

Best Buys

NON-AUTOMATIC

Proctor Turn-o-matic Model 1453 (Proctor and Schwartz Electric Co., 7th St. & Tabor Road, Philadelphia). $2.95. 500 watts. Non-automatic turnover type. Construction good although toast does not always turn freely. The doors are connected so that opening or closing either one causes the other to open or close. Rayon cord.

AUTOMATIC

Heatmaster Cat. No. 884 (Sears, Roebuck and Co., Chicago). $3.95 plus postage. A-c only. 500 watts. Semi-automatic turnover type. Excellent construction—somewhat similar to that of *Proctor* Model 1440. Good quality cotton cord.

Also Acceptable

NON-AUTOMATIC

Hotpoint Model 119T45 (General Electric Co., Bridgeport, Conn.). $2.95. 450 watts. Non-automatic turnover type. Construction better than average. Rayon cord.

Manning-Bowman Model 78 (Manning-Bowman Co., Meriden, Conn.). $2.95. 470 watts. Non-automatic turnover type. Construction fairly good. Toasts poorly at bottom, and occasionally at side. Rayon cord.

Universal Model E 6912 (Landers, Frary and Clark, New Britain, Conn.). $3.25. 625 watts. Non-automatic turnover type. Construction sturdy, but stiff hinges may make doors hard to close. Occasionally fails to toast thoroughly at side.

Royal Rochester Model 13320 (Robeson-Rochester Corp., Rochester, N. Y.). $2.95. 500 watts. Non-automatic turnover type. Toast not always uniform. Molded handles become too hot. Good cotton cord.

Sunbeam Model 4 (Chicago Flexible Shaft Co., Chicago). $4.95. 660 watts. Horizontal table-stove type. Non-automatic toaster with open grids. May be used for toasting thick sandwiches. Toast slightly streaked. No handles on base, hence cannot conveniently be carried when hot. Bottom hinged to remove crumbs.

AUTOMATIC

Proctor Thermostatic Model 1440 (Proctor and Schwartz Electric Co.). $5.95. A-c only. 500 watts. Semi-automatic turnover type. Excellent construction; has spring to hold doors closed. Thermostat has settings well marked. Good quality cotton cord.

Toastmaster Model 1B6 (McGraw Electric Co., Minneapolis, Minn.). $16.00. 1100 watts. This is a two-slice, fully automatic toaster. On test, one sample showed electric insulation failure at high voltage and high temperature. Shock hazard in normal use will probably be slight, however. Toasts both sides at once; gives very even toast. Excellent mechanical construction, with thermally compensated, clock-work, time control which toasts the first slices longer than those put in after the toaster is hot. Heavy cotton cord.

Universal Model E7822 (Landers, Frary and Clark). $14.95. 660 watts. Off-on switch on cord. Two-slice, fully automatic toaster. Construction good; but since there is no thermal compensation, the toaster should be pre-heated for a minute or so before using. Sometimes does not toast uniformly. Crumbs can be removed only by shaking the toaster.

Not Acceptable

Ward's Supreme Quality Cat. No. 5131 (Distributed by Montgomery Ward & Co., Albany, N. Y.; made by Electrahot Mfg. Co., Mansfield, Ohio). $1.87 plus postage. 550 watts. Non-automatic. Black-enameled base radiates excessive heat to table top. Doors rest on table when open. Handles poorly designed; one came off in unpacking. Toasts poorly at bottom of slice.

Heatmaster Cat. No. 1183 (Sears, Roebuck and Co.). $1.89 plus postage. 550 watts. Non-automatic. Excessive table-top temperatures. Doors rest on table when open. Poor mechanical construction. Toasts lighter at bottom of slice.

Samson Model 299 (Samson-United Corp.). $1.98. 550 watts. Non-automatic. Excessive table-top temperatures. Poor mechanical construction. Toasts lighter at bottom of slice.

Ward's Standard Quality Cat. No. 5258 (Montgomery Ward & Co.). $3.69 plus postage. 450 watts. Semi-automatic turnover type. Poor construction; attached cord passes through loose porcelain bushing; heating element has extremely loose mounting. Badly shaped, making toaster difficult to open without touching hot metal. Rim of base may scratch table top if toaster is tipped slightly while on table.

Westinghouse Model TTC-114 (Westinghouse Electric and Manufacturing Co.). $3.50. 500 watts. Non-automatic. Door hinges very stiff; has small handles so placed as to make opening the door difficult. Considerable risk of burn, or of upsetting toaster when turning the toast. Fails to toast bread thoroughly along the side.

Handy Hot "Sterling" Model AEUE No. 504 (Chicago Electric Mfg. Co.). $1.48. 550 watts. Short cord, only 4 feet long. Non-automatic. Table-top temperature exceeded 200°F. in normal operation. No insulating feet. Badly shaped, making toaster difficult to open without touching hot metal. Flimsy construction; bad design of springs on doors makes operation with one hand impossible.

The following two toasters were examined but were not given the performance test because of their generally and obviously inferior design and construction. Both showed poor insulation. Handles failed to protect the user against contact with the hot toaster. The doors rest on the table when open:

Challenge Cat. No. 860 (Sears, Roebuck and Co.). $.89 plus postage. Enamel fumed badly when heated.

Ward's Two Slice Cat. No. 5238 (Montgomery Ward & Co.). $.85 plus postage.

The New AUTOMOBILES

An automobile expert presents a preliminary appraisal of the 1937 cars. Special economy models lead list of the year's developments.

AUTOMOBILES FOR THE COMING YEAR can be obtained with several improvements—greater economy of operation, somewhat greater safety, and greater comfort. Most of the many changes made in the 1937 models fall under these three headings. No one tendency dominates all models. Some engines have been made larger, a few smaller; some cars are longer, a few shorter than last year, visibility has been increased in some and decreased in others. The engineers have done a better job than the "art" departments on the whole, although improvements in external appearance are noticeable.

Greater Economy

Improvements in economy have proceeded in two different directions. First of all, special economy models are available in the low-priced field without sacrifice of seating capacity or full-size appearance. A 60 H.P. *Ford*, identical as to chassis with the regular models but selling for $40 less, is driven by a small V-8 engine and, with proper tuning, should come near to delivering the 25 miles per gallon claimed for it. Performance of the car with this smaller V-8 engine should approximate that of its larger brother fairly well up to 40 M.P.H. Above that speed, acceleration and hill-climbing ability will suffer, though the maximum speed is in the neighborhood of 70 M.P.H. These disabilities are the price of economy, and are true of the *Plymouth* with special economy equipment, and also of the *Willys*.

The *Willys* appears at the Auto Show with the financial affairs of the company in better order than in the past. The *Willys* now is of standard width and has standard width seats, with greatly improved appearance, but with the same power-plant, which has been amply proved in service. Gas mileage will approach or better 27 miles per gallon on the open road. *Willys* riding-qualities have been considerably improved, and its operating economy is probably unequalled in any other standard car.

The optional economy equipment which can be ordered on *Plymouth* cars cuts down the output of the regular size engine from 82 to 65 H.P. and includes a reduced rear axle ratio. (Reducing the gear ratio, as, in this case, from 4.1 to 1 to 3.73 to 1, cuts down the number of times the engine revolves per turn of the rear wheels, cuts down the power available at a particular car speed, and allows the engine to operate more efficiently, use less gasoline and oil, and last longer. It sometimes increases the top speed.) With the special economy equipment mentioned above, mileage will be about 3 miles per gallon better than on the standard *Plymouth*. Like the other economy cars, the *Plymouth* with this equipment will slow down on hills at the higher speeds and be less agile in traffic, though the top speed should be around 70.

RUMBLE SEATS COME INSIDE.

Chevrolet fits its Master model (the equivalent of last year's Standard, no Knee Action) with a reduced rear axle ratio in the interest of economy, but it is doubtful if this car will give much better mileage than the 85 H.P. *Ford*, which has likewise reduced its ratio in the 1937 models. *Chevrolet* provides an economy unit for fleet use, but will not supply it to individual buyers. The *Graham* 85 is capable of giving, as last year, gas mileage in the lower twenties.

Compared with these economy models, other improvements in economy are slight. Increased mileage is claimed for many cars as a result of engine and carburetor refinement, though at the same time, especially in General Motors lines, the engines are larger, with increased cylinder volume. The tendency toward weight reduction, most notable in *Chevrolet*, benefits economy, as does the reduction of rear axle ratios on *Dodge*, *LaSalle*, *Oldsmobile*, etc. Optional overdrives, which when in use increase gas mileage by about 3 miles per gallon, are retained on *Studebaker*, *Chrysler*, *DeSoto*, *Nash*, and *Graham*. Overdrives give the effect of a reduced axle ratio at speeds above 35-45 miles per hour.

Gains in Safety

Claims for increased safety in 1937 cars are based on a number of factors. The all-steel body is now in use on most General Motors cars; of other makes, only *Packard*, the *Graham* 85, and a few high-priced cars still retain steel-and-wood construction and soft roofs. Most steel bodies have been reinforced this year. Lowering of floors (and consequently of the center of gravity) is general. Floors are usually between 16 and 20 inches from the ground, centers of gravity between 20 and 26 inches. Some rear floors are flat, some are crowned, some—notably *Ford* and of course *Lincoln Zephyr*—still have "tunnels." Some floors (*Chevrolet*, *Buick*) which were flat last year have low tunnels now.

A definite and rather high price has been paid for these lowered floors (*Pontiac* states that it spent a million dollars for this purpose). Lowered floors have forced a wide adoption of hypoid rear axle gears, in which the driveshaft enters the rear axle housing at a lower point. Hypoid gears require special lubricants which must be changed frequently and completely. When hypoid gears are not used, driveshafts have been lowered by adding a third universal joint and running the shaft in an arc (*Oldsmobile*), or by extending the transmission shaft far out and slightly downward to the rear, as on *Pontiac*. Tunnels were at worst merely an inconvenience.

Considerable work has been done to increase the rigidity of chassis frames, usually without greatly increasing their weight. This adds to stability and freedom from body troubles. More important for safety is the wider adoption, notably by *Studebaker*, all *Chrysler* lines, *Graham*, and *Willys* (by *Hudson* in 1934), of direct-acting "airplane-type" shock absorbers which are in appearance long telescoping tubes. They are easier to maintain and give superior control of spring action. Torsion or anti-sway bars are more in use, often at both front and rear. They are an effective makeshift giving better stability on curves.

There has been an improvement in vision upward, and in some cases downward, from the driver's seat, and the front seat itself on many cars rises as it is pulled forward by the short driver—thereby, however, making a tall front-seat passenger doubly miserable. These improvements have been offset by obstructions to vision, to the rear through windows often divided by a rear-panel brace, but especially and inexcusably by the thickness of front pillars and the wide curves joining them with the roof. No moderate-priced sedan presents a pillar with a width to the eye of less than four inches at its thinnest section, and many pillars, at eye level for a six-foot driver, are seven inches wide, hiding an oncoming car or several pedestrians at a short distance. Hoods have almost invariably been made longer and harder to see over in the direction of travel, the right curb or wheel-track being invisible at any point within 30 feet or so of the car. Existence of right front fenders must of course be taken on faith while driving.

Hudson, allegedly forced by buyer resistance, has moved the speedometer down away from the line of vision, and other cars show little gain in visibility for this important instrument. On *Pontiac* speed must be gauged by locating a travelling pointer through a 5/16" slit. All projections have, to prevent injury in crashes, been removed from instrument panels on Chrysler lines, but it is on these cars that the pillars are, perhaps, worst of all.

Steering Ratios

On larger cars the ratio of steering gears has been increased again, which makes more "winding up" necessary on turns or in parking, and maneuverability further sacrificed by other changes for better straight-ahead control. Fortunately, steering ratios on some of the more popular cars have been reduced. *Studebaker* and *Graham* (on some models) use a variable-ratio steering gear with excellent results. Few changes have been made in brakes, except on *Ford*, which has a redesigned system, cable-and-conduit operated. No cars in addition to *Hudson* and *Cord* have adopted the Bendix Electric Hand for shifting gears, in spite of its convenience.

Passenger comfort has been definitely improved by seats which are almost always wider (*Ford* is an exception) and often higher from the floor. There is usually 4 feet of shoulder room on the front seat and 4½ feet of elbow room on the rear seat. Headroom has been increased in a few cases. Doors are an inch or so higher on some cars, and are often wider, especially at floor level, due to forward movement of the body on the chassis. *Willys* doors are exceptionally wide for a four-door car. The forward movement of engines and bodies continues this year. It makes for greater riding comfort and more room, but is considered by many engineers to contribute to poor balance, skidding, and loss of traction. More bodies are insulated against the transmission of noise and vibration from the frame by rubber mountings, and the amount of silencing material in the bodies has been increased. A quieter ride is the result.

Capacity of trunks, and of storage compartments on no-trunk models, has been increased either by burrowing deeper into the body or by extending the rear bulge of the body. On no-trunk *Chevrolet* sedans the spare tire is exposed at the rear and baggage must be extracted across the rear seat. On *Willys* and on *Plymouth* "Business" models considerable luggage space is supplied but no trunk is available. On the whole, storage capacity is now so great that a full load of passengers and a trunk full of baggage may badly overload the rear springs.

No change on 1937 cars seemed to be greeted by Auto Show patrons more thankfully than the installation on nearly all cars of rain gutters over doors and windows. There is a tendency in coupes to replace wind-and-weather-swept rumble seats by inside occasional seats behind the main seat and to devote the rear deck to luggage.

Although the New York show produced less than the usual number of great mechanical "features," the engineers have made many detail changes. Chief of these is, perhaps, the enlarging and redesigning of the *Chevrolet* motor, including a better crankshaft, and the provision of cylinder diameter and piston stroke which are nearly equal. This makes for a smoother running motor or one which, for equal smoothness, is simpler to build. The same tendency appears in *Oldsmobile*, *Pontiac 6*, and *DeSoto*. *Buick* has provided a floating oil intake (cleaner oil is supposed to be on the top, at least in starting) and omits

oil filters; a really good filter would cost manufacturers about $4 per car. Many hoods raise like lids, and the motor sides are hidden by panels which must often, when repairs are to be made, be unbolted by a mechanic working for $1.50 per hour. Use of rubber is increased. There is about as much rubber in the rest of the car as there is in the tires. *Studebaker* has a door latch which ends slamming. The *Studebaker* President has a very interesting overdrive without free wheeling. The problem of generating sufficient electric current and that of controlling clutch chatter have been worked on, cooling made more efficient, fans more quiet, automatic chokes improved (or at least modified), etc.

The work of the engineers is thus hinted at because, in the selection of a car, the points which the salesman can tell about are less important by far than those he cannot tell about or show. On the 1937 *Dodge*, for instance, the angle of the "kingpin" has been reduced 4°, and this change may mean far more to driving comfort and safety than the 3-inch wider windshield, or than any metal tailoring.

Ratings Later

A formal rating of the 1937 cars will be made later, when hand-made show cars have entered production and production-lines are "shaken down," and when sufficient time has elapsed for obtaining actual performance data.

In connection with the "economy" cars—*Plymouth*, *Willys*, and 60 H.P. *Ford*, it should be pointed out that hundreds of such limited-performance cars are in use by fleet drivers whose time is money to their employers and whose safe operation has cash value.

It may be said that there are fewer mechanical reasons, with the 1937 models, for buying a *Dodge* over a *Plymouth* De Luxe, or a De Luxe *Plymouth* over a Business *Plymouth*. The *Chevrolet* Master De Luxe will have outstanding performance at moderate speeds for a car of low price at a penalty, compared with the Master model, of about 2 miles less per gallon. The *Pontiac* 6 has good riding qualities and room, if its performance is satisfactory to the buyer. The *Pontiac* 8 lacks advantages, except for high speed, over the *Pontiac* 6. *DeSoto* is more economical this year, and will give very good high speed economy in overdrive. The *Studebaker* Dictator 6 has a very shrewd balance of desirable features and should, in its price field, be carefully studied. Subject to the elimination of a few "bugs," the *Packard* 6 is favored over the *Packard* 120, which sells for about $175 more. The *Buick* Special presents, in Model 47, a car which seems a very good value at the price. The *Hudson-Terraplane* line probably has more unique features of construction and performance than any other, and should be investigated for purposes of comparison at least. *Chrysler* Royale is, save for trim, identical with *DeSoto*. Except for the most extreme loads or speeds, little advantage over the *Buick* Special is possessed by the *Buick* Century or the new V-8 *LaSalle*, and for a car of their price the *Studebaker* President 8 is suggested as a more usable balance of qualities. *Lincoln Zephyr*, which had many bugs last year, has been improved, and the price reduced. The *Nash* line is more favorably viewed than last year, but insufficient performance data on it are as yet available. Considerable mechanical changes made in *Oldsmobile* 6 and *Oldsmobile* 8 require suspended judgment on them for the present. Few cars will maintain high speeds with better economy than the *Graham* Supercharger 116, even without overdrive, but the supercharger confers few advantages for ordinary work. The *Graham* Supercharger 120 is hardly superior to the 116 in performance and sells for $110 more. Judgment on the *Graham* 95, in some ways the most interesting of the line, must for the present be suspended.

1937 Prices

The following list, arranged in order of delivered prices, includes only cars mentioned in the accompanying article. Since it is impossible to include delivered prices for all parts of the United States, New York City delivered prices, for 4-door sedans without trunks, are given as a basis for comparison.

MAKE AND MODEL	1937 F.O.B. PRICE	DELIVERED, N. Y.	CHANGE FROM 1936 DELIVERED PRICE
Willys	$450	$570 (approx.)	(new model)
Ford 60 H.P.	555	665	(new model)
Chevrolet Master (*Compares with 1936 Chevrolet Standard*)	595	693.35	up $ 19
Plymouth Business	595	698.50	down 10
Ford 85 H.P. Standard	595	708	up 13
Chevrolet Master Deluxe	660	760.85	up 11.45
Plymouth Deluxe	670	779	down 6
Graham Crusader 85	665	805	up 5
Terraplane Deluxe	675	829	up 20
Dodge	745	859	down 8
Nash-Lafayette (*Compares with 1936 Nash 400 Deluxe*)	700*	871	down 70
DeSoto	785	909	down 25
Pontiac 6 (*Compares with 1936 Pontiac De-Luxe 6*)	745	918	down 6
Graham Cavalier 95	775	940	down 13
Chrysler Royal	815	948	down 78 (approx.)
Studebaker Dictator Custom 6	775	957	up 59
Oldsmobile 6	790	965	up 9
Pontiac 8	805	976.75	down 15
Buick Special Series 40	845	1033	down 33
Hudson De Luxe 8	840	1039	up 20 (approx.)
Packard 6	895	1046	down 7
Nash Ambassador 6	845*	1060	down 50 (approx.)
Oldsmobile 8	890	1077	down 25 (approx.)
Graham Supercharger 116	895	1095	(new model)
Studebaker President Custom 8	1045	1178	down 88
Nash Ambassador 8	945*	1192	down 22 (approx.)
Graham Supercharger 120	995	1205	down 135
Packard 120-C	1045	1221	down 64 (approx.)
Buick Century Series 60	1035	1248	down 59
LaSalle	1145*	1295	down 100
Lincoln Zephyr	1190	1363	down 130

* With trunk only.

WINTER MOTOR OILS

THE MOST IMPORTANT SINGLE QUALity of winter motor oils is ease of flow at low temperatures. If the oil becomes very thick at low temperatures, the battery and starting motor will not be able to turn over the engine. On the other hand it must not thin out too readily as the engine heats up if proper lubrication is to be maintained.

For greatest economy, one should always use the lightest oil that will not give noticeable "slap," caused by too large piston clearance. In winter time SAE 10 or 10W oils should be satisfactory in all cars except those with badly worn pistons and bearings.

All the oils tested were either SAE 10 or 10W. Both have the same flow characteristics (viscosity) at the normal operating temperatures, but the specifications for 10W oil call for a special limited viscosity at O°F which will assure a free flow of oil at that temperature. The SAE 10 specifications have no such limitation. This limited viscosity is desirable as it insures adequate lubrication without too great a drag on the starting motor. In the regions where extreme cold is encountered, 10W oils are definitely superior to SAE 10 oils.

Many Oils Misbranded

Approximately half of the 10W oils tested were found to be misbranded, being SAE 10 and not 10W. Tests made by the North Dakota Regulatory Department and the University of Minnesota Engineering Experiment Station during the winter of 1934–35 showed about one-third and two-thirds of the samples respectively to be similarly misbranded. As with the summer oils stress is laid on the change of viscosity with temperature. No oils are rated as "Best Buys" which were not pure Pennsylvania or paraffin base oils. Paraffin base oils have superior lubricating quality and relatively small change in viscosity with change of temperature.

The prices given are for quart purchases unless otherwise stated. Purchasing oil in one-quart lots, particularly the canned variety, is usually expensive. You can make considerable savings in the course of a year by buying in larger quantities and putting the oil in the crankcase yourself.

It is not necessary to change your oil unless driving is done under particularly dusty conditions. Even then frequent changes are not necessary if your car is equipped with an oil filter which is cleaned frequently. In most cases the car may be run the entire winter without an oil change. However, with the first warm weather, the oil should be changed, because the light winter oil is too thin for safe lubrication.

Experimental work on automobile engines has led to the conclusion that the thickness of the oil on the cylinder walls is of paramount importance in determining starting drag. The oil at the bearings has very little effect. For this reason when putting up the car for the night in cold weather, stop the engine by pulling out the choke rod rather than by turning off the ignition. The engine will start much more easily the following morning because the viscosity of the oil on the cylinder walls has been lowered by the raw gasoline drawn in.

Best Buys

Wards 100% Pure Pennsylvania SAE 10 (Purchased at Montgomery Ward store, Chicago) 13.8c a quart in five-quart lots (plus postage). Met specifications for 10W oil.

Cross Country SAE 10 (Sears, Roebuck and Co., Chicago) 17 to 21c a quart from retail stores in different cities. Not listed in Sears Roebuck catalog. Met specifications for 10W oil.

Unique SAE 10 (Phillip's Petroleum Co.) 16c.

Shell Regular 10W (Shell Eastern Petroleum Products, Inc.) 25c.

Also Acceptable

Havoline 10W (The Texas Co.) 30c.

Mobiloil 10W (Socony-Vacuum Oil Co.) 30c.

Sinclair-Penn 10W (Sinclair Refining Co.) 30c.

Kendall 10W (Kendall Refining Co.) 35c.

Quaker State 10W (Quaker State Refining Co.) 35c.

Polarine SAE 10 (Standard Oil Co. of Indiana) 21c.

Derby SAE 10 (Derby Oil Co.) 25c.

Texaco SAE 10 (The Texas Co.) 25c.

Koolmotor SAE 10 (Cities Service Co.) 30c.

Richlube SAE 10 (Richfield Oil Co.) 30c.

Esso Uniflow No. 1 (Colonial Beacon Oil Co.) 35c.

Kendall SAE 10 (Kendall Refining Co.) 35c.

Quaker State SAE 10 (Quaker State Refining Co.) 35c.

The following oils were misbranded as 10W oils, but are otherwise satisfactory as to quality.

Essolube 10W (Colonial Beacon Oil Co.) 25c.

Veedol 10W (Tide Water Oil Co.) 30c.

Shell-Penn 10W (Shell Eastern Petroleum Products, Inc.) 30c.

Pennzoil 10W (Pennzoil Co.) 35c.

Valvoline 10W (Valvoline Oil Co.) 35c.

Wolf's Head 10W (Wolverine—Empire Refining Co.) 35c.

Not Acceptable

Macy's 10W (R. H. Macy and Co.) Much too thick at operating temperature of engine.

Iso Vis "D" (Standard Oil Co. of Indiana) Diluted with kerosene.

Tests of the following oils indicated that they would not give adequate lubrication at operating temperature of engine.

Conoco Germ Process SAE 10 (Continental Oil Co.)

Motorine SAE 10 (Continental Oil Co.)

Penn-Rad 10W (Radbill Oil Co.) Pour point too high.

Phillip's 66 10W (Phillip's Petroleum Co.)

The following oils thinned out too readily as they heated up.

Cycol SAE 10 (Associated Oil Co.)

Golden Shell SAE 10 (Purchased in Calif.) (Shell Oil Co.)

Triton 10W (Union Oil Co.) Pour point too high.

CHILDREN'S SHOES

Fit, design, and construction are all important in the purchase of shoes for children. This report tells which brands are well made and how to get proper fit.

LABORATORY TESTS OF TWELVE BRANDS of children's shoes reveal two outstanding values which can save harried parents several dollars a year.

The $3.50 *Edwards* shoe had leather, construction, and workmanship of the same high quality as the $5.50 *Pediforme* and the $5.75 *Indian Walk*. It was inferior to these well made and expensive shoes only in the quality of parts of the lining. This shoe lacks stiffening in the arch—which is considered poor construction by some shoe experts, but not by others.

The *Thom McAn* shoe at $1.85 was also of outstanding quality for the money, comparing favorably with shoes costing $3.00 to $3.50. Each is an excellent buy in its own price group—and both are listed as *Best Buys*.

The quality of the rest of the shoes tested was about proportional to their price, cheap shoes having poor leather and cheap construction, and expensive shoes having good leather and strong construction.

Most of the better children's shoes, like most adults' shoes, had vegetable-tanned soles. Some of the cheaper shoes, however, had chrome-tanned soles. Chrome-tanned soles are long-wearing, but they absorb mosture readily and are very slippery when wet. The more expensive vegetable-tanned soles may wear out more quickly, but they do not wet through, and stay damp and soggy, so readily.

The shoes tested were brown oxfords, size 10, and the prices given in the listings are for this type and size. Smaller-sized shoes in some of the brands cost less.

There are three main factors to be considered when children's shoes are purchased: first, fit, which is by far the most important factor; second, the design of the shoe; and third, the construction of the shoe and the quality of materials from which it is made.

It is very important that the fit be snug around the heel and ankle, but without distorting the natural shape of the foot, and leaving plenty of room for the toes. First make sure that the heel fits snugly but with no excessive pressure on any point. The ball of the foot should lie squarely in the widest portion of the shoe. This point is too often neglected when a shoe is bought for the growing child. *The shoe should fit correctly when it is bought; it should not be bought to fit at some future time.*

A parent should not purchase children's shoes by mail order or without taking the child to the store to be fitted, unless he is prepared to return the shoes any number of times to obtain a correct fit.

A normal foot can probably be fitted satisfactorily by any of the twelve brands tested, provided the particular store has in stock all of the customary lengths and widths.

Allowance for Growth

Be sure that the shoe is long and wide enough. The average shoe wears out in three or four months—and during this time the child's foot grows at the most about a quarter of an inch. While this growth must be allowed for and room for complete freedom of toe action must be provided, it is doubtful that the inside of the shoe ever needs to be much more than half an inch longer than the foot at the time of the fitting. In some cheap shoes skimping of the leather may make the shoe tight around the toes even if it is long enough, and allowance must be made for this. If a child should outgrow a pair of shoes before they are worn out, it is far better to discard them than to open the way to foot troubles by allowing the toes to be cramped.

Compared with adults' shoes, children's shoes are sensibly designed. All children's feet are not, of course, exactly the same in shape and proportion, and there is no one design suitable for all feet. There are, however, certain principles of design which should be adhered to in children's shoes. Of the twelve brands tested, the more expensive shoes were in general more carefully designed than the cheap ones. None could be considered bad in this respect.

When examining shoes, place a long pencil or a ruler along the inner side of the shoe just above the sole. The farther the outline of the shoe follows this straight line along toward the toe, the better. The inner side of the normal foot is almost straight and was never meant to protrude at the big toe joint. Its normal shape is as shown in the diagram, and for comfortable walking, and healthy feet, the shoe should follow this shape.

Entirely apart from length, it is important to have sufficient fullness in the toe. If the manufacturer has skimped on toe leather and drawn the toe back so tightly that there is no perpendicular room for toe freedom, the shoe cannot fit properly.

The heel must be well made so as to follow the natural curves of the child's heel, fitting snugly, and not rubbing at any one spot.

The shoe should neither bulge nor bind at the ankle. The fastening over the instep should be adjustable. For this reason, oxfords and laced moccasins with loose tongues and plenty of space between the lacings are best for children. Sandals with buckles and adjustable straps are preferable to shoes with straps which button.

For young children especially the shoe should be very flexible and light-

weight. The extra weight and stiffness of very heavy leathers is one cause of fatigue and foot ailments. This factor should be taken into account when one considers buying a shoe so sturdy that it will wear for a long time.

The presence of stiffening in the arch probably does no harm *so long as it does not change or interfere with the normal shape of the foot.* "Corrective" shoes with special supports should be bought only under the direct guidance of a competent foot specialist, however.

What has been said applies equally to shoes for children of school age and pre-school age except, perhaps, that more attention should be paid to softness and flexibility for younger children. Babies do not need shoes at all before they can walk. Leather on the feet is needed only for protection from hard, sharp objects.

Before a child walks, no foot covering is needed except for extra warmth. Even then, it is important that a stocking or a bootee be large enough—at least one-half inch longer than the foot.

While he is learning to walk, shoes are only a hindrance to the child, and may be harmful. The first shoe should be soft and pliable, and follow the shape of the foot.

High Shoes vs. Low

There is some disagreement among child specialists as to whether the first shoe should be low or high. The argument for the low shoe is that it allows more freedom for development of the child's muscles. The argument on the other side is that while the child's bones are so soft and unformed, some support is beneficial. For children on good diet, with adequate supply of vitamins and calcium to assure proper bone growth, it is probably safe to leave the matter to individual preference, unless the child's foot is weak or abnormally shaped, in which case a doctor's advice should be sought.

A similar problem is encountered in the question of the desirability of moccasins for children's feet. Some feel that the child's shoe should have an arch, others that it should not. Moccasins are usually soft and pliable, and for this reason many prefer them for young children even though there is no shaping in the arch.

SCUFFING TEST REVEALS RESISTANCE TO ABRASION AT TOE AND HEEL. SHARKSKIN TOES SHOW SCARCELY ANY WEAR. LEFT TO RIGHT (IN BOTH PICTURES): EDWARDS, THOM McAN, MONTGOMERY WARD.

All of the shoes covered in this report were examined for construction and tested for durability. The various types of shoe construction were described in the September issue of CONSUMERS UNION *Reports* in the report on shoes for adults. Eight of the children's shoes tested were of the Goodyear welt type. Of these, three had a welt construction around the entire shoe, and the rest had welt construction only in the forepart. For durability, flexibility, and ease of resoling, the welt shoe is superior to the stitchdown. The *Thom McAn* shoe was the only shoe tested of those priced at less than $2 which was of welt construction. One shoe was a moccasin.

The toe box, one of the parts of the shoe on which comment is made in the ratings, is a stiffening-piece at the tip of the toe. It is made of substances of varying hardness. When high enough, it keeps the shoe from pressing on the child's toe, and may be of some value in protecting the toes from heavy falling objects. If the toe box is very stiff, it will scuff badly unless extra leather protection is placed over the tip. The sharkskin tip, which is very resistant to scuffing, has attained great popularity because of its durability. Of the shoes tested, seven had sharkskin tips. In four cases, the sharkskin covered the regular upper leather; in the other three, the sharkskin replaced the regular toe.

The thread used in the sewing of a shoe is important. Linen is much stronger than cotton, especially when wet. In the three shoes of best construction in the test the soles were attached with linen thread.

Children's Shoes

Best Buys

Edwards (J. Edwards and Co., 314-22 N. 12th St., Philadelphia. Write the manufacturer for the name of the dealer nearest you). $3.50. Welt construction; sharkskin tip; linen thread. Good quality leather; vegetable-tanned sole. Good design, especially in the arch.

Thom McAn (Melville Shoe Corp., NYC). $1.85. Welt construction. Sharkskin tip; cotton thread. Fair

upper leather; good vegetable-tanned soles. Quality not as good as in some of more expensive shoes, but price considered, it is an excellent buy.

Also Acceptable

Indian Walk (Foot Form Shoe Shops, Inc., NYC). $5.75. Welt construction; sharkskin tip; linen thread. Good quality leather; vegetable-tanned sole.

Pediforme (Pediforme Shoe Co., Inc., NYC). $5.50. Welt construction; sharkskin tip; linen thread. Good quality leather; vegetable-tanned sole. Very good design, but unnecessarily exaggerated for normal foot.

Buster Brown (Brown Shoe Co., St. Louis). $3.50. Welt construction; sharkskin tip; cotton thread. Leather of fair quality, chrome-tanned sole.

Wilton Moccasin (G. H. Bass & Co., Wilton, Me.). $4.00. True moccasin. Fair quality leather; vegetable-tanned sole; cotton thread. Shoe has excellent softness and flexibility, and the best toe-room of all the shoes. Good shoe for young child. A similar shoe (*Macy's Gro-Shoe*) made by G. H. Bass & Co. is sold by R. H. Macy and Co., NYC, for $4.23.

Pied Piper (Pied Piper Shoe Co., Wausau, Wis.). $4.00. Welt construction; sharkskin tip; cotton thread. Fair quality leather; chrome-tanned sole. (Advertised as "World's greatest health shoes.") Expensive for mediocre quality.

Bonnie Laddie (Distributed by Morse and Rogers, NYC). $3.30. Welt construction; sharkskin tip; cotton thread. The International Shoe Company states that the same model is also carried by the Hutchinson-Winch Shoe Company under the name *Bob-o-link*. Fair quality leather; vegetable-tanned sole.

Not Acceptable

Endicott Johnson (Endicott Johnson Corp., Endicott, N. Y.). $2.50. Welt construction; cotton thread; extra tip of same leather as upper. (Sharkskin tips available in the larger sizes.) Upper leather of fair quality, sole leather poor texture; vegetable-tanned sole. Sole showed the least resistance to abrasion of all shoes tested. Shoe has good toe-room; but the shoe as a whole is not flexible enough.

Montgomery Ward Cat. No. 2900 (Montgomery Ward & Co., Albany, N. Y.). $1.69 plus postage. Stitchdown construction; no extra toe tip. Poor uppers. Fair quality outer sole, chrome-tanned. Superior to other stitchdowns in that it contained a vegetable-tanned mid-sole as well as an insole. Sole very stiff, however.

J. C. Penney 7160-9 (J. C. Penney Co., NYC). $1.49. Stitchdown construction; cotton thread; no extra tip. (Sharkskin tips available in larger sizes.) Poor leather; chrome-tanned sole. Shoe skimpily constructed. Hard insole; flat arch.

Sears Roebuck Cat. No. 1125 (Sears Roebuck & Co., Philadelphia). $1.00 plus postage. Stitchdown construction; moccasin style; cotton thread; no extra tip. Poor leather; chrome-tanned sole. Hard insoles; skimpily cut shoe. Might be suitable for child with very narrow foot. Would be *Also Acceptable* on account of low price if it were not a mail-order shoe; could be recommended only to those willing to return it if it were not a good fit.

WINES - *domestic and imported*

Wines differ from district to district, from vineyard to vineyard, and from year to year. A good vintage year on a label means little unless it is backed by the name of a reliable dealer.

CONSUMERS FIND MORE CONFUSION existing in the wine field than in almost any other. This is at least partially due to the many types of wine, to lack of effective governmental regulations, and to the misleading advertising compaigns (intended to be "educational") undertaken by the vintners and the importers of wines. New federal regulations, effective December 15th, should result in considerable improvement.

At least some of the advertisers are realizing that to advise the average American hostess to serve three or more different wines at dinner, each in a glass of special shape, is like insisting that the meal be served by a butler. The reaction of the consumer has been a tendency to abandon wines entirely and to serve distilled liquors, the service of which does no require a complicated etiquette.

Pure wines offer many advantages not possessed by other types of alcoholic beverages, and their consumption is free from many of the effects that many people find objectionable in distilled liquors.

Wine is the fermented juice of grapes, with or without the addition of brandy. The sugar in the ripe grapes is fermented into alcohol. The wine contains, in addition, unfermented sugar and certain mineral and organic constituents.

Wines are generally divided into two categories—red and white. Red wines are those which are actually red; all others are classed as white, however yellow or brown they may be. If only the juice of the grapes is fermented, no matter what their original color, the wine produced is white. If the whole grape is fermented, the coloring matter of the skin is absorbed by the wine, and if red grapes are used, the wine will be red.

If during fermentation, before all the grape sugar has been converted into alcohol, enough brandy is added to raise the alcoholic content above fifteen per cent, fermentation stops, and some of the grape sugar remains. The result is a sweet or fortified wine, such as port, sherry, or muscatel. If the natural fermentation is allowed to

proceed to completion, most of the grape sugar is converted into alcohol; the result is a relatively dry (not sweet) wine, such as Claret or Riesling. The juice of some grapes contains enough sugar so that some remains after fermentation has ceased, and these wines are semi-sweet, natural wines, such as the Sauterne and Barsac. If the carbon dioxide which is produced during fermentation is allowed to escape, the wine is "still"; if some of the gas is retained by fermenting under pressure, the wine contains small bubbles of gas and is known as "sparkling."

Wines, like milk, can undergo acid fermentation, forming vinegar. Consumption of these is likely to have unpleasant results. A highly acid, stringent taste is a sign of unsoundness that can be readily recognized.

In purchasing wines, select the cheapest wine that suits your individual taste. Christmas packages of wines are usually a mixture of excellent, fair, and poor, and are often used as a means of getting rid of bad products. "Bargain" wines may be good if they are from a good shipper; often they are spoiled wines.

Wine experts have prepared elaborate regulations for the correct storage of wines. Actually, wines are a perishable product, and if it is intended to keep them for some time, they should be stored at an even, cool temperature, with the bottles lying on their sides so as to keep the corks moist. It has been found, however, that most consumers purchase only a bottle or two of wine at a time, so that storage is not a serious problem. Wine should not be kept in a refrigerator for more than a few hours at a time.

Serving Wines

Many experts contend that unless white wines are served cooled, and red wines at room temperature, there is irreparable damage to their flavor. A study of the liquor preferences of a large group of Americans, however, indicates that most of them like red wines chilled, and express distaste for the same wine served at room temperature.

Volumes have been written on the service of wines, and many self-appointed experts have reached a "thou shalt not" stage. Their commandments can safely be disregarded. One wine will generally suffice for a meal; but if more than one is served, the dry precedes the sweet. One need not hesitate to serve any combination of food and wine that suits one's own palate, keeping in mind only that the really sweet wines may have the same effect on the appetite as a plate of ice cream. They should, therefore, be served only at such times as one might serve a sweet dessert.

AMERICAN WINES

American wines are of two types: those produced from grapes native to America and entirely unrelated to the European wines, and those produced in California from vines transplanted from European stock. The soil and climate in California have, in many cases, greatly modified the European vines, and the resulting wine is frequently very different from the imported product.

Unfortunately, most American vintners name their products, even when produced from grape varieties native to this country, with European type names, instead of developing their own names and types. This results in a comparison of the American product with the European, generally to the disadvantage of the former. An American dry, white wine might prove pleasant did not the "Riesling" on the label lead the palate to expect characteristics possessed only by wine made from grapes grown on the banks of the Rhine. A notable exception to this practice is the Paul Garrett Company of Brooklyn, N. Y., which markets its wines either under brand names, such as *Virginia Dare*, or under the name of the type of grape, such as *Concord* or *Scuppernong*.

Regulations effective after December 15th will require that California wines of the European type be labeled either "American" or "Californian." These may be classified as follows:

Dry or semi-dry white wines: Sauterne, Riesling, Rhine, dry Sherry.
Dry red wines: Claret, Burgundy, Zirfandel.
Sweet white wines: Sherry, Muscatel, Tokay, Angelica (this last is strictly an American type).
Sweet red wines: Port, Malaga.

The average California wine is quite young and lacks much of the finesse of its European namesake. This is due partly to the absence of stocks of aged wine at the time of repeal, and also to the fact that during prohibition many of the fine wine vines were replaced by those yielding more abundant crops of the larger, heavier-skinned grapes that would stand shipment to the eastern markets for sale for family wine-making. Since the vintner must not only build up his stock of aged wines but also replant his vineyards, several more years will be required before American wines may be expected to attain pre-war quality.

The products of the better shippers are sound, sturdy wines, somewhat lacking in *finesse* but possessing taste characteristics that will please the majority of Americans not accustomed to good imported wines.

IMPORTED WINES

The majority of the European wines on the American market is of French, Spanish, or Portuguese origin; smaller quantities come from Hungary, Germany, Italy, Austria, and Russia.

The most important French wines are those from Bordeaux, Burgundy, and Champagne. They are used mainly as table wines and range in price from $.79 to $6.00 for a 24-ounce bottle.

The Bordeaux and Burgundy districts are divided into what might be considered the equivalent of our counties, and these are subdivided into communes or towns. Wines may be bottled under the name of the "state" (e.g., *Bordeaux*), of the "county" (e.g., *Médoc*), or of the "town" (e.g., *Saint-Estèphe*). Of course, the vintner bottles his product under the name that commands the most respect. If neither the town nor the county wines are famous, he uses the district name, such as *Bordeaux* or *Bourgogne* (*Burgundy*). Wines bearing such district names alone are known as district wines. The "town" or commune wines are apt to be the better grade.

There is a further subdivision of the communes into estates, generally called "châteaux" in the bordeaux district and "clos" in Burgundy. Some wines are named after the estate, as *Château Margaux* and *Château Pontet-Canet*. These estates, especially in the Bordeaux district, have been officially graded for quality.

The reputation of the shipper outweighs both the vintage year and the district in which the wine originates. A *1923 Gevrey Chambertin* (a good year and a premium district) from a shipper of poor repute may not approach in quality a *1925 Burgundy* (the district wine of a fair year). The same is true of the name wines; château wines may frequently be found inferior to good district wines.

Vintage

Much has been written on "vintages." The grapes and the resulting wines are greatly influenced by the temperature, the rainfall, and the prevalence of plant insects during the growing season. Hence wines of one year are often better than those of another year, but the vintage year in itself is no guarantee of good quality. The skill and ethics of the shipper take precedence. No house with any regard for its good reputation will ship a really poor wine under its label. Of course, the vintages of an excellent year from a shipper's cellars will be superior to those of poorer years and to the non-vintage (blended) wines of the same shipper, but generally one should not pay the premium price demanded for the wines of the better year.

Bordeaux and Burgundy

The two foremost wine sections of France are divided, for the red wines, as follows:

Bordeaux:
- Médoc (St. Estèphe, Pauillac, Margaux, St. Julien);
- Graves (Léognan, Pessac, Martillac);
- Saint-Emilion.

Burgundy:
- Côte d'Or
  - Côte de Nuits (Gevrey Chambertin, Morey, Chambolle-Musigny, Vougeot, Flagey-Echézeaux, Vosne-Romanée, Richebourg, Nuits Saint-Georges)
  - Côte de Beaune (Aloxe Corton, Hospices de Beaune, Clos du Roi, Pommard, Volnay);
- Côte Chalonnaise (Mercurey);
- Côte Mâconnaise (Mâcon);
- Côte Beaujolais (Moulin-à-Vent, Fleurie, Morgon, Juliénas).

The *Médoc* wines, ruby-colored, mellow, are the lightest and most delicate of the Bordeaux wines; red *Graves* wines are somewhat stronger; the *Saint-Emilion* are heavier and darker and have a peculiar flavor.

The red Burgundies, all heavier and of a deeper hue than even the *Saint-Emilion*, are ranked as the greatest red wines in the world. From the communes in the Côte de Nuits come the heaviest and finest of the Burgundies. The *Beaujolais* wines are lighter and approach the *Saint-Emilion* in delicacy.

For the white wines, the districts are divided as follows:

Bordeaux:
- Sauternes (Bommes, Preignac, Barsac);
- Graves (Martillac).

Burgundy:
- Côte de Beaune (Montrachet, Meursault, Corton Charlemagne, Bâtard Montrachet);
- Côte Mâconnaise (Pouilly-Fuissé, Mâcon);
- Chablis (Valmur, Vaudésir).

Sauterne and *Barsac* are golden-colored, delicate, and fragrant, and though they are semi-sweet, they are much used in this country as table wines. The world-renowned *Château d'Yquem* produces the most expensive *Sauterne*, and is often imitated. White *Graves* is extremely dry. Barsac is essentially a commune within the district of Sauternais, but for its white wines it ranks in importance with a county. Like their red relatives, the white Bordeaux wines are noted for their light and delicate body.

Burgundies vary greatly from year to year; wines not dated are usually of a bad year and are generally blended by the less reliable dealers. Sparkling Burgundies are almost invariably made of the poorest Burgundy stocks, and are practically never worth the high price at which they are sold. If one wants a carbonated wine, a cheap Champagne is no more expensive than many Burgundies, and is preferable.

Champagne is sparkling because it has been allowed to undergo a second fermentation in the bottle. Aging and clarification also take place during this time. This necessitates much labor, which, with high breakage and taxes, makes the product costly. Just before final corking, sweetening may be added. Dry, medium, and sweet Champagnes are sold under the respective descriptions "brut," "dry," and "sec."

YEAR	BORDEAUX RED	BORDEAUX WHITE	BURGUNDY RED AND WHITE	CHAMPAGNE
1934	Good	Fair	Very good	Good
1933	Good	Good	Good	Great
1932	Poor	Poor	Poor	Poor
1931	Poor	Poor	Poor	Poor
1930	Poor	Poor	Poor	Poor
1929	Very great	Very great	Very great	Very good
1928	Great	Great	Very good	Very great
1927	Poor	Good	Poor	Poor
1926	Great	Great	Great	Great
1925	Fair	Fair	Fair	Poor
1924	Great	Very good	Fair	Poor
1923	Good	Good	Great	Very good

VINTAGE CHART

(But a good year on a label may not mean a good wine)

SHERRY

A true Sherry comes only from the Jerez district of Spain and owes its peculiar taste to the influence of the soil and the methods employed in its fermentation and aging. It can be obtained in the complete range from very dry to very sweet. The semi-dry Sherries are finding favor as table wines. The ability of Sherry to keep for some time after the bottle is opened and its value as a flavoring in sauces and desserts make it a favorite in many households.

Statements of age of Sherry are generally fraudulent, for the wine is almost invariably blended and no definite age can truthfully be given. Some Sherries bear a label such as

"Solera 1852." This does not mean that the wine was made in 1852, but that the "solera" or blending system was begun in 1852.

Sherries are sold under type names as well as under the names of shippers. From dry to sweet, the more common type names are Manzanilla, Amontillado, Montilla, Amoroso, Oloroso, and brown.

PORT

Port, while Portuguese by origin, is English by adoption. It is a sweet, red, fortified wine from the valley of the Douro in northern Portugal. It is really a dessert wine. For centuries it has been prescribed as a tonic, and "invalid port" was once a standard article in the wine trade.

The "ruby" port is deep red and relatively young (averaging eight years). As the wine matures, the successive clarifications tend to reduce the color, and a light or "tawny" wine is obtained. Most of the ports in this market are blends, and a statement of age is fairly definite proof of unethical practices. Unblended "vintage" ports are practically unknown here.

Because the quality of a specific wine in a producer's line is approximately that of the whole line, the producers are rated rather than the specific wines. Laboratory tests are of considerably less value in the rating of wines than in the rating of other beverages. Hence, the following ratings are based mainly on taste ratings by experts. While opinions differ in all matters of taste, it is believed that the ratings will provide a generally reliable guide for the wine buyer.

Domestic Wines

Since domestic wines are sold under innumerable brands on the various local markets, it is impossible to do more in this report than list some of the large distributors.

Best Buys

K. Arakelian, Inc.
Fruit Industries, Ltd.

Also Acceptable

Shewan Jones, Inc.
Bisceglia Brothers
United Wineries, Inc.

Not Acceptable

Eastern Wine Corporation
Geffen Industry, Inc.

Imported Wines

BORDEAUX

Best Buys

Cruse & Fils, Frères
Sichel & Cie.
Ed. Kressman & Co.

Also Acceptable

Schroeder & Schyler & Co.
J. Calvet & Cie.
Bouchard Père et Fils
Brossault & Cie.

Not Acceptable

Barton & Guestier
Chauvenet
Sichel & Fils, Frères

BURGUNDY

Best Buys

Pierre Ponnelle
Louis Latour
Bouchard Père & Fils
Thomas Bassot

Also Acceptable

Chanson Père et Cie.
J. Calvet & Cie.
Leon Rigault
Jouvet
Faiveley

Not Acceptable

Bouchard Ainé (Note similarity to name above under *Best Buys*)
F. Chauvenet
Barton & Guestier

The following are the names of the foremost shippers of Champagne, Sherry, and Port:

CHAMPAGNE

Ayala
J. Bollinger & Co.
Deutz & Geldermann
Charles Heidsieck
Veuve Clicquot Ponsardin
Ernest Irroy
Krug & Co.
Lanson Père & Fils
Montebello
G. H. Mumm & Co.
Pol Roger & Co.

SHERRY

Berry Brothers & Co. (London)
Pedro Domecq (Jerez de la Frontera)
Duff Gordon & Co. (Puerta Santa Maria)
Williams & Humbert (Jerez de la Frontera)
John W. Burdon (Puerta Santa Maria)
Sandemann & Co. (London)
Hanky Bannister (London)
Gonzalez & Byass & Co., Ltd., (Jerez de la Frontera)

PORT

Berry Brothers & Co. (London)
Cockburn, Smithes & Co. (Oporto)
Richard Brooks & Co. (London)
Dow's (Silva & Cosens, Oporto)

CORRECTION

MEN'S SHIRTS: October, 1936 issue, page 9, second and third columns: The current catalog numbers of the two *Montgomery Ward* shirts listed should be interchanged. The shirt corresponding to No. 35 B 2570, spring-summer 1936 catalog, is No. 35 C 2745, 94c, in the fall-winter catalog; that corresponding to No. 35 B 2585, spring-summer 1936 catalog, is No. 35 C 2613, $1.29, in the fall-winter catalog.

Baking Powder

Alum Baking Powder Puts This Much Glauber's Salt in a Plate of Biscuits.

The Function of Baking Powder is to make baked foods light. It does this by forming small bubbles of gas —carbon dioxide—when it comes into contact with moisture and the heat of baking.

Baking powder is made of bicarbonate of soda, starch, and an acid salt. During baking, the soda reacts with the acid, forming carbon dioxide. The starch is added to baking powder to retard deterioration by absorbing moisture which may enter during storage.

There are three main types of baking powders:

Tartrate powders: The action of these powders is based on the combination of tartaric acid and cream of tartar (the acids found in grapes) with the bicarbonate of soda.

Phosphate powders: These contain calcium acid phosphate, which acts on the bicarbonate of soda present to liberate carbon dioxide.

Alum powders: Powders of this group contain sodium aluminum sulfate as the acid ingredient. There has been, and still is, bitter controversy as to whether it is safe to use aluminum compounds in foods. Many authorities insist that the use of such compounds has not been shown to render foods deleterious to health. It is admitted, however, that aluminum baking powders may have a laxative action. This is not surprising, since the well known cathartic, Glauber's Salt (sodium sulfate), is one of the end products formed by the aluminum-type baking powders.

Some authorities consider that aluminum is itself the harmful ingredient. Investigation has shown that alum-phosphate baking powder interferes with the reproduction and growth of experimental animals. Whether it would have the same effects on human beings is, however, open to question.

The opinions of the European authorities are distinctly adverse to the use of leavens containing alum, and their sale is forbidden in England, France, Germany, Switzerland, Sweden, and other countries.

The controversy on the subject is by no means settled. But in view of the possibility that alum baking powders are harmful, and of the availability of other types at low cost, they are listed as *Not Acceptable*.

Samples of all of the different types of baking powder found on the market were included in the test. It was found that they varied in the amount of carbon dioxide they formed, the highest in this respect producing about twenty-five per cent more than the lowest.

The question of the safety of aluminum in baking powder is, of course, tied up with the larger question of whether it is safe to use this metal for cooking vessels. With the Aluminum Company of America financing much of the research, commercial considerations have beclouded the issue and very little purely unbiased research has been done in this country.

The consensus of scientific opinion, however, indicates that since the amount of aluminum dissolved from cooking vessels is in any case quite small, and since considerable quantities of aluminum do occur in foods in the natural state, the danger in eating food cooked in aluminum utensils is negligible.

The problem is an important one, since a large portion of the food reaching the consumer comes to him by way of aluminum pots and pans.

Best Buy

Ann Page (The Quaker Maid Co., Inc., NYC). 8 oz., 10c. Calcium acid phosphate, bicarbonate of soda, corn starch. 8.1c per oz. of carbon dioxide.

Also Acceptable

(*In order of increasing cost of amount of carbon dioxide formed*)

Dr. Price's (Standard Brands, Inc., NYC). 4 oz., 8c. Calcium acid phosphate, bicarbonate of soda, corn starch. 13.9c per oz. of carbon dioxide.

Macy's Lily White (Distr. by R. H. Macy Co., NYC). 6 oz., 16c. Cream of tartar, tartaric acid, bicarbonate of soda, starch. 20.3c per oz. of carbon dioxide.

Royal (Standard Brands, Inc., NYC). 6 oz., 18c. Cream of tartar, tartaric acid, bicarbonate of soda, starch. 22.9c per oz. of carbon dioxide.

Schilling (A. Schilling & Co., San Francisco). 6 oz., 18c. Cream of tartar, tartaric acid, bicarbonate of soda, starch. 23.8c per oz. of carbon dioxide.

Not Acceptable

Clabber Girl (Hulman & Co., Terre Haute, Ind.). 10 oz., 9c. Contains sodium aluminum sulfate. 5.7c per oz. of carbon dioxide.

K—C (Jaques Manufacturing Co., Chicago). 10 oz., 9c. Contains sodium aluminum sulfate. 6.5c per oz. of carbon dioxide.

Davis (R. B. Davis Co., Hoboken). 6 oz., 9c. Contains sodium aluminum sulfate. 9.6c per oz. of carbon dioxide.

Calumet (Calumet Baking Powder Co., Chicago). 16 oz., 24c. Contains sodium aluminum sulfate. 10.3c per oz. of carbon dioxide.

Watkins (The J. R. Watkins Co., Winona, Minn.). 16 oz., 35c. Contains sodium aluminum sulfate. 16.5c per oz. of carbon dioxide.

To Consumers Union:

The following letters are typical of the large number received at Consumers Union Headquarters commenting on the series of liquor reports concluded in this issue. About two-thirds of the letters favored the policy of rating alcoholic beverages along with other products, and about one-third opposed:

Against

Ever since your report for September arrived I have intended to write you about your giving time and space, etc., to liquors. It was far more than a mere disappointment to me to see the appearance of this report in the September issue. It made me, to considerable degree, discount my faith in your ability to be scientific in any real sense of the word. Certainly, a more scientific approach would have been to go to the bottom of the effects of liquors on the human organism, on society, the family, the increasing accident toll, etc., etc. You have shown the common fault of being unscientific in the most important and most fundamental areas, namely, those of human life and human relationships.

Supposedly you are interested both in science and in the social and economic problems of our day. Surely you are not unaware that the whole liquor problem has a basic relation to all of these. Neither ought you be blind to the political corruption that is often tied up with the liquor traffic. If you are as interested in justice to labor as you claim to be, you ought also to know something of the comparison of the share of the consumer's dollar going to labor in the liquor industry to the share in other industries. You have indicated your interest in such things in your October number in the article, "Consumers and Labor".

Furthermore, I would suppose that you would deal with the vast number of products belonging to the essentials, and useful luxuries, instead of giving your skill and attention to a product which is not only useless, but physically and socially destructive. Whatever might be the personal practises of your staff, it would seem that from the standpoint of an ordinary degree of common-sense understanding of values, you would have found almost limitless numbers of products upon which the consumer needs scientific information before you ever thought of dealing with alcoholic liquors.

As yet, I do not intend to be like the irate subscriber to a newspaper who cancels his subscription. But it is putting it very mildly to say that I am very much disappointed with your organization in this regard. I am interested in the thing that I thought you were trying to do for the consumer. I was disappointed when a similar organization went into the ditch over a labor dispute, and was glad when your group made its appearance. I subscribed, not only for the benefit that I might derive, but more because I wanted to be a part of any movement which would deflate the ballyhoo of advertising and help uproot some of the corruption of a profit-at-any-price economic system. I hoped to recommend this service to as many folks as I could, but I cannot do it if you are going to be a part of this move to popularize liquor. I am very sure that I am by no means alone in my reaction to your liquor reports.

M.J.G.

Markesan, Wisconsin

I have found the reports of the Consumers' Union exceedingly interesting and helpful, but register protest against your going into the liquor business. Medical science has certainly demonstrated the harmfulness of alcoholic beverages, and the vast body of consumers, mainly working people, to whom you render service need not be urged to spend money on liquor in this subtle way.

A.T.P.

Oakland, Nebraska

For

The man who does not drink alcoholic beverages is not concerned with their quality; but his prejudice against them gives him no right to withhold the truth from those who do. I am interested in learning about the quality of the things I swallow, even more than I am about what are the "best buys". One of the reasons why I joined your organization was to learn about that quality. Your editorial policy has nothing to do with the prohibition question, but with which beverages are wholesome and which are not; and I request that you keep on, all through the other alcoholic as well as non-alcoholic drinks. The moment you become partisan, you lose authority. People vary in opinions, which makes life interesting; but facts are facts, and knowledge of facts makes life safe.

G.A.D.

Philadelphia, Pa.

I am glad that you included in your recent report comment and enlightenment on well known brands of liquors.

One could argue that the public would be better off not purchasing *any* brands of liquor, but this train of thought led us into the dismal swamp of prohibition. Evidently the public is determined to drink liquor, and it is entitled to the same protection against fraud in this field as it is entitled to (but seldom receives) in any other.

J.H.

New York, N.Y.